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ABSTRACT

The report contains an overall account of three annual evaluation studies (1971-73) of a project designed to demonstrate how four components supplemented the existing counseling system in the Pittsburgh Public Schools. The components providing occupational information were: (1) a career orientation program for sixth, seventh, and eighth grades; (2) a cooperative work experience program for secondary students enrolled in marketable skill-centered programs; (3) a placement program for high school graduates; and (4) Project SET (Select Employment Trainee), a counseling/training program for alienated potential high school drop-outs not enrolled in vocational programs. A summary describes each of the components and presents major conclusions of the three year evaluation reflecting the general success of the program. Other sections of the report provide descriptions of the interactive process used in evaluation, detailed descriptions of the program components, and the procedures used for each of the three evaluations. An in-depth discussion of the evaluation results (including tabulated achievement test scores and attitude data) is presented cumulatively by year for each project component, with emphasis on the third year. Appended are student, parent, and employer questionnaires for the project components, and a student achievement test for the career orientation program. (Author/MS)

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SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH: A THREE YEAR EVALUATION STUDY

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TABLE OF CONTENTS

		Page
PREFACE AND ACKNOWLEDGMENTS		vii
I.	SUMMARY	1
	A. The Career Orientation Program	2
	1. Phase I--6th Grade	2
	2. Phase II--7th Grade	3
	3. Phase III--8th Grade	3
	B. Graduate Placement and Cooperative Work Experience Programs	4
	C. Project SET (Select Employment Trainee)	5
II.	EVALUATION METHOD	7
	A. Program Evaluation	7
	B. The Interactive Process of Evaluation	8
III.	PROGRAM DESCRIPTIONS	11
	A. Career Orientation Program	11
	1. Phase I--6th Grade	11
	2. Phase II--7th Grade	13
	3. Phase III--8th Grade	15
	B. Graduate Placement and Cooperative Work Experience	17
	1. Full-time Placement	18
	2. Part-time Employment	18
	3. Cooperative Work Experience "A"	18
	C. Project SET (Select Employment Trainee)	18
	1. Purpose of the Program	18
	2. General Objectives	19
	3. Counseling	19
	4. Pre-Job Training	19
IV.	ANNUAL PROCEDURES	21
	A. 1971	21
	1. Career Orientation	21
	2. Graduate Placement and COOP	22
	3. Project SET	22
	B. 1972	22
	1. Career Orientation	22
	2. Graduate Placement and COOP	23
	3. Project SET	23

C. 1973 23
1. Career Orientation 23
2. Graduate Placement and COOP 24
3. Project SET 24
V. RESULTS AND DISCUSSION 25
A. Career Orientation 25
1. Phase I--6th Grade 25
2. Phase II--7th Grade 30
3. Phase III--8th Grade 44
B. Graduate Placement and COOP Programs 77
1. 1971 Summary 77
2. 1972 Summary 77
3. 1973 Evaluation Results 78
C. Project SET (Select Employment Trainee) 88
1. 1971 Summary 88
2. 1972 Summary 88
3. 1973 Evaluation Results 90
APPENDIX A. Student Questionnaire - Phase I 111
APPENDIX B Parents' Questionnaire - Phase I and Phase II 113
APPENDIX C Student Questionnaire - Phase II 115
APPENDIX D Student Questionnaire - Phase III 117
APPENDIX E Student Achievement Test - Phase III 119
APPENDIX F Student Questionnaire - Project SET 125
APPENDIX G Employer Questionnaire - Project SET 127
APPENDIX H Student Questionnaire - COOP 129
APPENDIX I Employer's Questionnaire - COOP 131

LIST OF TABLES

		Page
Table 1	Phase I: Attitude Data - Mean Total Score by School . . .	28
Table 2	Phase I: Attitude Data - Mean Subscore by School	29
Table 3	Phase II: Summary of Student Questionnaire Data by Center plus Overall Mean	35
Table 4	Phase II: Attitude Data - Subscore by Home School — Washington	37
Table 5	Phase II: Attitude Data - Subscore by Home School — South Side	39
Table 6	Phase II: Attitude Data - Subscore by Home School — Oliver	41
Table 7	Phase II: Attitude Data - Subscore by Home School — Arsenal	42
Table 8	Phase II: Attitude Data - Subscore by Home School — McNaugher	43
Table 9	Phase III: Achievement Data - Mean Total Score by OVT Center	46
Table 10	Phase III: Achievement Test - Subscore by OVT Center . .	48
Table 11	Phase III: Achievement Test - Number of Students per OVT Center Answering each Area	49
Table 12	Phase III: Achievement Test - Subscore by Home School — Washington	52
Table 13	Phase III: Achievement Test - Subscore by Home School — Arsenal	55
Table 14	Phase III: Achievement Test - Subscore by Home School — South Side	57
Table 15	Phase III: Achievement Test - Subscore by Home School — Oliver	59
Table 16	Phase III: Achievement Test - Subscore by Home School — McNaugher	60
Table 17	Phase III: Achievement Test - Number of Students per School Answering each Area — Washington	62
Table 18	Phase III: Achievement Test - Number of Students per School Answering each Area — Arsenal	64
Table 19	Phase III: Achievement Test - Number of Students per School Answering each Area — South Side	65
Table 20	Phase III: Achievement Test - Number of Students per School Answering each Area — Oliver	66
Table 21	Phase III: Achievement Test - Number of Students per School Answering each Area — McNaugher	67

Table 22	Phase III: Attitude - Subscore by Home School — Washington	70
Table 23	Phase III: Attitude - Subscore by Home School — Arsenal	72
Table 24	Phase III: Attitude - Subscore by Home School — South Side	73
Table 25	Phase III: Attitude - Subscore by Home School — McNaugher	75
Table 26	Phase III: Attitude - Subscore by Home School — Oliver	76
Table 27	School to Industry Program, 1973	79
Table 28	Employer's Questionnaire	84
Table 29	Size of Organizations Responding (COOP)	86
Table 30	Number of COOP Students Employed	86
Table 31	Placement Program (SET)	101

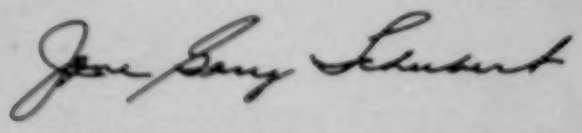
PREFACE AND ACKNOWLEDGMENTS

In 1970, the American Institutes for Research (AIR) and the Pittsburgh School District contracted for the first of three evaluation studies of "Selected Functional Components of a Vocational Counseling System for Urban Youth." This demonstration project, conducted by the Pittsburgh Board of Education's Occupational, Vocational & Technical Education Division, was created under the Provisions of Part D of the Vocational Educational Amendments of 1968. The project is designed to demonstrate how these four components supplement the existing counseling system in the Pittsburgh Public Schools. Each component provides occupational information at a given "check-point" along an individual's educational continuum. These "check-points" include: a Career Orientation Program for pre-adolescents; a Cooperative Work Experience Program for secondary students enrolled in marketable skill-centered programs; a Placement Program for high school graduates; and a provision for a Counseling/Training Program to serve high school students who are not enrolled in vocational programs. Alternatives are presented for increasing cooperation and participation in public education by community agencies such as Model Cities, private schools, and the business/industrial community. This project implements an approach for relating vocational-technical education to flexible, comprehensive programming.

The purpose of this report is to present the results of the three evaluation studies conducted by AIR. Reports of the first two studies were submitted to the Pittsburgh School District in 1971 and 1972 respectively. This report contains an overall account of the three evaluation studies, with emphasis on the results of the third year evaluation. This report is organized in the following manner. An overall summary consisting of major conclusions of the 3-year evaluation follows this preface. The report continues with descriptions of the interactive process used to conduct this evaluation and some illustrations of how the process functions. Section III follows with descriptions of each of the program components. Section IV describes the procedures used for each of the three evaluations. Included in this discussion will be an identification of each year's evaluation

emphasis with the rationale for the specific focus. Section V of the report presents the results of the evaluation studies. These results will be discussed cumulatively by year by project component. For example, a summary of each year's evaluation results will be presented by component, followed by an in-depth discussion of the results of the third year evaluation. In so doing, the report will represent a comprehensive, self-contained document which will summarize the 3-year evaluation effort by AIR with a focus on the third year evaluation.

Throughout this 3-year effort, various staff members from both the American Institutes for Research and the Pittsburgh Public Schools cooperated to produce an evaluation document useful for program modifications of the vocational counseling system. During the first evaluation AIR was represented by Dr. Michael Rosenfeld, Dr. Jane Schubert, and Mr. Robert Collins; the second evaluation was conducted primarily by Dr. Rosenfeld and Dr. Schubert; the third evaluation has been directed by Dr. Schubert. During our working relationship with the Pittsburgh Public Schools, AIR received the competent and willing cooperation of representatives from the school district, particularly the Occupational, Vocational & Technical Education Division. The individuals mentioned assisted in the planning, conducting and report preparation phases of these evaluations. Appreciation is acknowledged to the following individuals for their support in arranging meetings with project managers and teachers, scheduling the testing in the representative schools, supplying the necessary data for the program descriptions, and preliminary reviews of this and other reports: Ms. Rachael Brooks, Dr. Alma Evans, Dr. Nicholas Flannick, Mr. Al Markowski, Mr. Fred Monaco, Mr. John Pardini, and Ms. Rose Smith. In addition, AIR would like to express sincere appreciation to the many school administrators, teachers, and students who participated in these studies during the past three years.



Jane Gary Schubert
Principal Investigator

I. SUMMARY

The purpose of this evaluation study was to examine the demonstration project, "Selected Functional Components of a Vocational Counseling System for Urban Youth," and, as a result of this assessment, identify ways in which the ongoing efforts of this system might be strengthened. Three evaluation efforts have been conducted by AIR for the Pittsburgh School District; reports for the first two assessments were submitted in 1971 and 1972. This report summarizes those two reports and presents the results of the third study. The demonstration project consists of four components: A Career Orientation Program for pre-adolescents; a Cooperative Work Experience Program for secondary students enrolled in marketable skill-centered programs; a Placement Program for high school graduates; and a Counseling/Training Program which serves high school students who are not enrolled in vocational programs. Each of the three evaluations focused on specific components of this vocational counseling system.

The interactive process of evaluation was used throughout the 3-year evaluation effort. This process applies the theory that the role of the evaluator and the perception of this role by the project staff can be a critical element in determining the success or failure of an experimental program. Support of this notion requires that the evaluation team and the project staff work together to determine project objectives, then develop the appropriate instruments to measure those objectives. The results of the assessment can then be used to recommend program modifications. Evaluation can then be viewed as a positive element in the creation and refinement of experimental programs which strengthens these programs, rather than as a negative element whose purpose is solely to identify program weaknesses. During this evaluation, both project staff administrators and classroom teachers cooperated with AIR in clarifying specific component objectives, and submitting items which were used as the basis for the design of attitude and performance measures. The final instruments were constructed by AIR and approved by the sponsor.

The following summary describes each of the components of the vocational counseling program, identifies which component received emphasis in each evaluation, and presents the overall results of the 3-year effort.

A. The Career Orientation Program

1. Phase I--6th Grade

This introduces the 3-year exploratory experience of occupational education to students in the 6th grade. "Hands-on" activities in the field of Human Relations, Production, Communications, and Economics provide the basis for program activities. Students meet for one 80-minute activity period per week. Program implementation began in March 1971. At that time, a team of three itinerant teachers visited selected city schools which participated in the program. In 1971-72, 15 participating schools were serviced by a staff increased from three (one itinerant team) to nine (three itinerant teams). In 1972-73, 15 schools and 1,320 students received instruction. Of the nine itinerant teachers, three were assigned to the South Side Center. As of September 1973, the itinerant team concept was discontinued and these teachers joined the Phase II and Phase III staffs at the Washington and South Side Education Centers. Phase I is now taught only at three middle schools.

In 1971, the first evaluation reviewed the Phase I plans and reported the results of interviews with the itinerant team. Recommendations were made on the basis of that data. The final evaluation gathered attitude data from a small sample of Phase I students and parents. Phase I received major evaluation emphasis during the second study. Student performance data, student attitude data, classroom teacher and itinerant teacher attitude data were collected. Overall, Phase I seemed to be operating smoothly. Student achievement scores indicated that students were learning the desired material. The attitude measures administered during the second and third evaluations suggested that students liked the programs.

2. Phase II--7th Grade

This is the second of the 3-year Career Orientation Program. Students increase their participation to one-half day per week, traveling from their home schools to one of five education centers. The purpose of Phase II is to involve students further in "hands-on" activities in ten vocational areas. These ten content areas represent various occupational careers which students may choose within the disciplines of Business Education, Home Economics, and Industrial Arts. In 1970-71, 1,635 students in the program were instructed by 15 teachers. In 1971-72, it was noted that enrollment increased to 2,850, and the teaching staff had grown to 30. In the 1972-73 school year, 2,736 students received instruction in Phase II. By November 1973, the Phase II enrollment decreased to 2,623.

Phase II received primary evaluation emphasis during the first evaluation. Students, teachers, and principals were sampled to receive information regarding the program. However, each subsequent evaluation included a minor emphasis on program operations and participant attitudes. The results of the studies showed that students generally performed well on the achievement measures and that they liked the program. The first evaluation revealed that some students were not receiving instruction in all ten areas; however, the circumstances causing this weakness were corrected. Now all students receive instruction in all ten vocational areas. The teachers indicated strong commitment to the program and identified areas they considered weak. Since teachers were not sampled in the last study, it is not recorded whether their suggestions were used in recent program modification. Overall, Phase II seems to be functioning well and achieves one of its goals, to help students select four of the ten vocational areas which they would like to study in Phase III.

3. Phase III--8th Grade

The final year of the exploratory program consists of an in-depth exploration of vocational occupations in four related areas. The students choose the four areas from the ten to which they have been exposed in Phase II. Students and teachers make contracts which provide the framework for

the study of a specific content area. Students who participate in this phase also travel to the various education centers to receive instruction one-half day per week. Upon completion of Phase III, students should be more equipped to select the type of curriculum he or she wishes to pursue in high school. Overall, the same teachers who teach Phase II also teach Phase III. Their school day is divided between providing instruction to Phase II and Phase III students. Phase III was not implemented during the first evaluation. In the 1971-72 school year, during the second study, 45 feeder schools sent 2,711 students to the OVT Centers. The third year evaluation study showed enrollment figures increased to 3,247 students from 49 city schools. By November 1973, the enrollment dropped to 2,493 students from 55 feeder schools.

The third year evaluation focused on Phase III program operations. Attitude questionnaires had been administered to Phase III teachers during the second evaluation. The final year emphasized student performance and achievement. The results of the evaluation showed that students liked the program and generally did well on the performance measure. Students also indicated that participation in this program helped them choose a course of study for the next year. Student scores were not as high as one might expect for a program where students choose the subject areas in which they receive in-depth instruction. Students correctly responded to approximately 56 percent of the items. If the students liked the program as much as their attitude scores seemed to indicate, then it might be worthwhile investigating why the performance scores were not higher.

B. Graduate Placement and Cooperative Work Experience Programs

The overall goals of Graduate Placement and Cooperative Work Experience (COOP) are quite similar. The Placement Program attempts to find employment for graduating seniors or locate situations in which high school seniors become apprentices in particular trades. The COOP program is designed to provide work experience during the senior year while the student completes academic and vocational requirements for graduation. The COOP program currently serves students primarily enrolled in skill-centered programs. Responsibility for all student placement rests with ten centrally-based

work experience coordinators who are supported on a part-time basis by ten school-based coordinators who also serve as distributive education teachers. Both of these components are integral parts of a broader system of counseling which includes testing and guidance, the instructional process, and other school and work-related experiences.

The 1971 evaluation study conducted by AIR focused most prominently on this segment of the overall vocational counseling program. At that time, attitude measures and/or personal interviews were used to collect data from every level of program participant. Employers of students, graduates who received placement, coordinators, and students were included in the evaluation. The results suggested that both programs were well conceived and well administered with a positive and open attitude by the staff toward continuous updating. The second evaluation study reviewed ongoing procedures and program operations. This review again revealed that the programs were operating efficiently and effectively. A new feature to the overall program was the addition of a job center in each of five Pittsburgh Schools. These job centers attempt to find jobs for students in the inner-city who are not continuing their formal education beyond high school. On-site recruiting of students by employers occurred in the job center rather than in the occupational setting.

The third evaluation gathered attitude data by submitting questionnaires to students in the programs and employers of students in the programs. Overall, the students appear to benefit from their work experience program. Employers indicate that students from the program are capable of joining an occupational environment, with no outstanding problem areas. In addition, the job centers located in selected high schools increased from 5 to 13.

C. Project SET (Select Employment Trainee)

Project SET identifies disadvantaged alienated students who are potential secondary school drop-outs, and provides them with counseling, occupational exploration, and training opportunities that will enable them to develop a marketable skill while creating positive attitudes toward education and work. Staff members of this component cooperate with other

placement agencies in the school system to provide opportunities for these students to learn about the world of work while meeting pragmatic economic and educational necessities. Staff members work closely with private industries and government agencies to supply these alienated youth with counseling and career exploration and training experiences. As of July 1973, Project SET became part of an expanded program entitled, "Cooperative Work Study Program for Disadvantaged Urban Youth."

The first evaluation conducted by AIR reviewed the developmental plan of Project SET and offered suggestions to the staff. Increased emphasis occurred in the second evaluation by administering attitude questionnaires to a sample of Project SET students, employers of students, parents, and the entire Project SET staff. The results suggested that the program was substantively strong--student attitudes toward the program seemed very positive. They enjoyed and benefited from the opportunity to work and to earn money while continuing their education. Although the percentage of return from the parents was small, those who did respond stated that they felt very positively about the program. The features they liked correlated with the features mentioned by students--namely that students could work to gain experience and earn money without sacrificing their formal education. Approximately 90 percent of the employers were interviewed by phone; overall, their responses suggested that the staff had been successful in communicating to the employers the needs of the students and the goals of the program. The employers reflected a positive and cooperative attitude toward helping these alienated students receive some assistance in finding meaningful opportunities in career exploration and experience.

Less emphasis was placed on Project SET during the third and final evaluation. Questionnaires were administered to a sample of students and employers of students. Again, the responses indicated a general satisfaction with the program. No distinct patterns or changes were noted.

II. EVALUATION METHOD

A. Program Evaluation

Flanagan (1969) in Educational Evaluation: New Roles, New Means, proposes a framework to assess the degree to which innovative educational treatments succeed in achieving their desired outcomes. His points focus on the need for:

- Clear specifications of project objectives. These objectives must reflect the behavioral changes desired in students.
- Program characteristics designed in such a way as to stimulate or originate the desired student outcomes.
- Program evaluation composed of both formative and summative stages. The formative stage assesses the degree to which each of the program components is operational and achieving its desired goals. This phase of evaluation assesses the degree to which the treatment aspects of the project are functioning as defined in the proposal or by the project manager. The summative stage involves the overall evaluation of program success. This evaluation normally takes place at the termination of the project. It includes measures of student performance as well as indices of the degree of implementation of project treatment components.
- Dynamic educational programs. In order to succeed, programs should contain mechanisms for change and improvement based on a continuous flow of data regarding the effectiveness of a given program at achieving a specified set of objectives.

B. The Interactive Process of Evaluation

In evaluating programs, the role of the evaluator has often been perceived in negative ways. Those most closely associated with the program frequently assume that an evaluation is to be conducted for the purpose of evaluating the personnel rather than the program itself. The existence of this attitude frequently makes it quite difficult to gather useful data on which to base recommendations for program change.

AIR supports the notion that the role played by an evaluator and the perception of this role by the project staff can be a critical factor in determining the success or failure of an experimental program. The efficiency and usefulness of the evaluator are maximized when functioning as a colleague anxious to help the program succeed rather than merely identifying and amplifying weaknesses which document failure. An evaluation of a program, particularly an experimental program in its early implementation stages, is not helpful if it stresses negative factors rather than providing data which can be used as a basis for appropriate changes necessary to achieve the program objectives. In order to help a program succeed, an evaluator can: (1) develop procedures for objectively determining the degree to which stated objectives are achieved, and (2) provide recommendations for improving project performance during the continuation of the project. The technique employed to achieve the objectives of this evaluation is the interactive process of evaluation. In this process, project staff members, such as classroom teachers, work together with the evaluation team in defining behavioral objectives of the program and developing the items which measure student achievement of those objectives.

The interactive process occurs at various levels of project staffing. During each of the three studies, the AIR evaluation team maintained continual contact with the project monitor to maintain awareness of project activities and discuss all materials used. Also, the development of the instruments was a joint effort by the evaluation team and the project teachers. For example, during an in-service meeting, the teachers received a copy of the revised behavioral objectives for each of the ten subject areas in Phase II of the

Career Orientation Program. They were asked to prepare at least two items which would measure one behavioral objective in the area they had taught. Each teacher was assigned two such objectives and thus was required to write no more than four items. Upon submission, these items were reviewed by a panel of teachers representing the Career Orientation education centers. The panel selected the items which most appropriately reflected the instruction in the centers. Upon completion of this task, the evaluation team edited items and then constructed the final instrument.

By cooperating on the development of the evaluation instruments: (1) the test reflected the content of instruction in the program; (2) students were tested on what they had been taught, rather than on what someone thought they had been taught; (3) student performance could be examined in light of program objectives; (4) the people on whom the primary responsibility for implementation rests played a direct role in assessing the strengths and weaknesses of the program; and (5) the evaluator acted as a consultant to help project staff learn some techniques of evaluation. In this way, the evaluation process becomes an aid to program modification.

III. PROGRAM DESCRIPTIONS

A. Career Orientation Program

The Career Orientation Program is a 3-phase program. Phase I (6th Grade) is an exploratory experience in which the students are exposed to four major concepts relating to the "world of work": Human Relationships (personal development); Production; Communications; and Economics (consumership).

In Phase II (7th Grade) the students gain actual experience in ten OVT areas with further reinforcement of the broad concepts of the "world of work" identified above. This phase also enables students to organize, manage, and operate a company as they explore the ten content areas.

Phase III (8th Grade) constitutes an opportunity to select from two to four subject areas from the ten areas explored in Phase II. In-depth exploration and individualized instruction is emphasized at this level.

1. Phase I--6th Grade

The purpose of the Phase I Career Orientation Program is to introduce the exploratory experience of occupational education to students in the 6th grade. "Hands-on" activities within the field of Human Relations, Production, Communications, and Economics provide the basis for curriculum development and selection.

Actual program implementation began in March 1971. At that time, three itinerant teachers were assigned to coordinate activities in Business, Home Economics, and Industrial Arts which were used as the vehicles for introducing the previously identified concepts to 6th graders in selected city schools. During the 1971-72 school year the number of itinerant teachers was expanded in order to staff three teams, each comprised of three teachers. These three teams services 15 city schools in the 1971-72 school year.

One of the primary goals of the Phase I program was to coordinate the Career Orientation activities with the academic program. Both Career Orientation teachers and academic teachers met regularly to exchange information regarding curriculum plans. The Phase I activities included the content of these plans when possible; for example, if students were learning how to use a typewriter, they might practice typing some of their spelling words.

Each team of itinerant teachers visited two or more schools per day where they conducted an 80-minute class session. During this time, the teachers supervised hands-on activities by students; in the early implementation stages of the program, these production activities extended over a period of weeks. As a result of the first year's evaluative inputs from teachers and students, the program was modified to limit the production of an item to no more than two class sessions. Each school, except Columbus, was visited by one itinerant team once a week. Columbus was visited four times each week.

Class sessions were conducted in a room especially set aside for use by the itinerant team. Class sizes ranged from 20 to 60 students. In some cases, the academic classroom teachers stayed with the class during the 80-minute session. Initially, a working model of the Phase I curriculum, implemented in the Chatham School in 1968, provided a basis for the activities planned by the itinerant teams. Following the first full year of implementation (1970-71), teachers revised the curriculum based on their classroom experiences. In 1971-72, the number of itinerant teachers increased to nine; these nine teachers comprised three teams who serviced city schools. In 1972-73, one team, or three of the nine itinerant teachers, was assigned to teach Phase II and Phase III at the South Side Education Center. As of September 1973, the itinerant team concept was discontinued. Phase I now services students only in the middle schools, Arsenal, Columbus, and McNaugher. Four of the itinerant teachers, now assigned to the Washington Education Center, teach Phase II and Phase III. Two members of the itinerant team also joined the teaching staff of Phase II and Phase III at the South Side Education Center.

2. Phase II-7th Grade

Career Orientation students in the 7th grade originate from feeder schools and are assigned to one of five locations--the South Side Education Center, the Washington Education Center, Oliver and Columbus Middle School, Arsenal Middle School and McNaugher School. Each student attends one half-day Career Orientation session per week. The purpose of Phase II is to involve students in "hands-on" activities in ten vocational areas. These exploratory introductions provide students with a body of knowledge and experience with which they can narrow their selection for further exploratory experiences in Phase III--the 8th grade. The ten content areas represent various occupational careers which people may choose within the disciplines of Business Education, Home Economics, and Industrial Arts. These ten content areas are:

Business Education	Home Economics	Industrial Arts
Business Communications	Foods and Nutrition	Manufacturing
Merchandising	Clothing and Textiles	Power and Transportation
Information Processing	Community Services	Construction
		Visual Communications

OVT exploratory programming is guided by teachers and paraprofessionals who work in teams to organize and supervise activities in each of the content areas. A secondary purpose for selecting particular content areas and creating the conceptual scheme previously defined is to have students participate in as many activities as possible within each content area, and in so doing, create products which will be sold in a retailing activity called a merchandise mart. The mart represents the culmination of a business activity and provides an opportunity for students to purchase the items which they and their colleagues have been producing. The year's activities are coordinated and set up on the basis of a business venture as related to the world of work. According to the concept, each discipline will serve the following functions:

Disciplines		Function
Business Education	—	Business
Industrial Arts	—	Production and Service
Home Economics	—	Production and Service

For example, the Business Department may set up a business on the basis of goods to be retailed--then handle all functions such as Business Communications, Merchandising, and Information Processing required to handle the business activities. Examples of potential business simulations are a boutique shop, a jewelry store, etc.

In order to efficiently organize the exploratory program in the manner previously described, teachers in each center are assigned to work in teams. Three teams, each consisting of one teacher from each of the three major disciplines, form a self-contained unit which relates to the areas in which they are working. Sixty to seventy-five students are assigned to one team and receive instruction in company-related activities within each of the ten areas from the three teachers to whom they have been assigned.

An example of team functioning might be: a team can be assigned to the areas of Home Economics (Foods and Nutrition), Industrial Arts (Manufacturing), and Business Education (Information Processing). Activity coordination within a team apportions responsibility for setting up an office to the Business Education component. The Manufacturing Lab produces the goods, with students performing tasks within the business such as quality control specialists, payroll clerks, or shipping clerks, etc. The Foods and Nutrition teacher establishes a cafeteria to serve the workers on the team. Items are mass produced rather than individually constructed. Within each area, a wage scale is set up for each job classification; students receive pay according to the tasks performed. The currency consists of either script or tokens which are used for purchasing items in a retailing activity or the cafeteria.

The conceptual framework of a business supplies a series of opportunities for all students to explore the ten areas related to the three major disciplines. At the conclusion of the year, each student is requested to select two or four of the ten areas which he or she desires to explore in the continuation of the Career Orientation Program--Phase III in the 8th grade.

The enrollment figures for Phase II for the 3-year period are as follows. The first study reported a total of 1,635 students who received Phase II instruction at two OVT Centers during the 1970-71 school year; the second study showed an increase to 2,850 students in the 1971-72 school year; the third study reflected an enrollment of 2,736 students in the 1972-73 school year. As of November 1973, the enrollment dropped to a total of 2,623 from 55 feeder schools to 5 OVT Centers.

3. Phase III--8th Grade

The Phase III--8th grade curriculum outlines more in-depth experiences of the "world of work" activities to which the students were first introduced in Phase II--7th grade. Emphasis is placed on processes basic to specific job activities found within the areas of Business Education, Home Economics, and Industrial Arts. Students are able to associate, integrate, and catalog these basic processes with specific job roles or careers ranging from entry level jobs to administrative positions. The educational goal of the experiences is the adaptation of this knowledge to future decision making by the students.

Students, functioning as members of large or small groups, or individually, are encouraged to develop greater inquiry abilities and participate in more specific activities, experiments, and projects. Student activities are realistic, interdisciplinary, and personal in nature. This program incorporates individualized instruction through the development of learning activity packages, which allows students to work at a pace that is challenging, but achievable. Each learning activity package or teacher-student contract contains the purpose of the program of study, specific curricular objectives, sample evaluation questions, and activities and the resources available for exploration of the selected area, e.g. manufacturing. If a student decides to terminate a contract, a new contract must be drawn up. This process is not designed to allow the student to casually make or break contracts; a contract can only be broken for good reason. During the 1971-72 school year, the Phase III curriculum was organized within the contract system into self-contained modules which could be implemented by the teacher within his or

her specialized area. The time period spent by each student within that discipline varied according to the student's preference.

The following list identifies the specific tasks of each of the ten content areas of the three academic disciplines.

Specific Task of Each Area:

- Business Communications--handles all business affairs of corporations.
- Information Processing--responsible for processing invoices, filing records, bookkeeping, etc.
- Merchandising--handles advertising and retailing services of the corporation.
- Clothing and Textiles, Manufacturing and Construction--production of goods.
- Visual Communications--responsible for producing signs, doing lay-out and copy work, printing needed materials; may also produce a product such as silk screening job or engraved tags.
- Power and Transportation--functions as the repair center.
- Health and Community Services--set up a health clinic to handle physical examinations of all the workers, maintain health records, operate first-aid area, provide public health and nutritional information to the workers, set up a model "Child Care" center, relate cosmetology as a service via grooming clinic, beauty or barber shop.
- Foods and Nutrition--would handle the food production by setting up a cafeteria or short-order shop to feed classes on a rotating basis. Students would pay for meals with money earned.

Forty-five feeder schools sent 2,711 students to the OVT Centers in the 1971-72 school year. During the 1972-73 school year, forty-nine schools contributed 3,247 students to Phase III. Fifty-five feeder schools sent 2,493 students to Phase III program as of November 1973.

B. Graduate Placement and Cooperative Work Experience

The Pittsburgh Board of Public Education recognizes student placement as a logical component of the educational process. Employment is viewed as an integral component of education because it assists students to become participating and productive members of our society and economy. The varied placement programs described here reflect AIR's understanding of the broad range of employment-related student needs.

Although their specific objectives differ, the overall objectives of Graduate Placement and Cooperative Work Experience (COOP) are linked. The Graduate Placement program attempts to find employment for graduating seniors or locate situations in which students become apprentices in particular trades. The COOP program is designed to provide work experience during the senior year while the student completes the academic and vocational requirements for graduation. Following graduation, students often remain in the same job they had during their work experience. The Pittsburgh COOP program has been expanded to serve both those students enrolled in skill centered programs and those who enrolled in non-skill centered programs (Project SET).

Primary responsibility for all student placement rests with ten Centrally-Based Coordinators. They are supported, on a part-time basis by ten School-Based Coordinators, who are Distributive Education teachers. They are further assisted by 15 work experience coordinators assigned to specialized placement programs designed to serve specific student populations.

In the performance of the placement function there exists a continuing relationship between the work experience coordinators and school counselors, as well as with teachers. This is essential in order for placement staff to have sufficient information necessary to assist a student in his or her transition from the classroom to the world of work.

1. Full-time Placement

The staff consists of central coordinators and supporting staff who serve graduates interested in career employment and drop-outs of working age.

2. Part-time Employment

The staff consists of central coordinators and supporting staff who provide placement assistance available to any student of working age regardless of his or her area of study. Credit is not awarded for such experience.

3. Cooperative Work Experience "A"

The staff consists of central coordinators and school based coordinators. Cooperative Work Experience "A" is a part-time, supervised employment, related to a high school senior's skill training. Grades are assigned and credit is awarded for successful work experience. Students are paid by employers at entry level rates. This program offers the student an opportunity to practice and enhance his or her learned skills. In addition, she/he is exposed to the industrial requirements of production and distribution which often are difficult to simulate in the classroom.

C. Project SET (Select Employment Trainee)

1. Purpose of the Program

The purpose of Project SET is to identify disadvantaged alienated students who are potential secondary school drop-outs, and provide them with counseling, exploration and training opportunities that will enable them to develop a marketable skill while creating positive attitudes toward education and work.

General Objectives:

- To provide disadvantaged alienated students with skills which will enable them, upon completion of their secondary education, to go on to further education or obtain a job in the private sector.
- To demonstrate that the private sector, local school systems, and government agencies can effectively coordinate their individual efforts in providing alienated youth with meaningful counseling, career exploration and training experiences and to develop innovative program models for these experiences.
- To help disadvantaged alienated students achieve positive work experiences while they continue formal education and training to prepare for the world of work.

Counseling:

- To identify student attitudes toward education and work.
- To identify the students' interests and capabilities, then use them as a basis of counseling in determining training and career exploration potential.
- To provide supportive counseling in an attempt to develop positive attitudes toward work.

Pre-Job Training:

- To develop an open, non-structured participation program which utilizes filmstrips, movies, tapes, and role-play activities to provide experiences in potential employer-employee situations.
- To explore careers identified as relevant to student interests.

IV. ANNUAL PROCEDURES

Each of the three evaluation studies conducted for the Pittsburgh School District has focused on a different component of the vocational counseling program. The nature of each evaluation was determined by the level of funding for the annual effort, the degree of implementation of each program component, and the extent to which each component had been evaluated by AIR during one of these three studies. Therefore, prior to each evaluation study, the AIR evaluation team and members of the Pittsburgh Public Schools project staff agreed on the selected elements which would be evaluated that year. The following section specifies the focus for each of the evaluation studies.

A. 1971

Major emphasis was placed on the program components which were most operational. Therefore, Phase II of the Career Orientation program, and the COOP and Graduate Placement programs received attention. Less emphasis was placed on Phase I of the Career Orientation program and Project SET. Evaluation design for this study consisted of:

1. Career Orientation

- Administration of an attitude questionnaire to the Phase I itinerant team.
- Classroom observations.
- A meeting between the itinerant team and one member of the evaluation team.
- Administration of a performance measure to a 23 percent sample of Phase II students.
- Administration of an attitude measure to a 23 percent sample of Phase II students.

- Administration of an attitude measure to all Phase II teachers.
- Administration of an attitude measure to both principals in the OVT Centers.

2. Graduate Placement and COOP

- Administration of an attitude measure to employers of COOP students and graduates.
- Personal interviews with central coordinators in the placement center.
- Administration of attitude measures to a sample of students.

3. Project SET

- A review of developmental plans of Project SET.

B. 1972

Again, major emphasis was placed on the most operational program components. This year, the evaluation focused on Phase I and Phase II of the Career Orientation program and Project SET. Less emphasis was placed on Phase III and the COOP and Graduate Placement programs. Evaluation design for this study consisted of:

1. Career Orientation

- Administration of a performance measure to a 22 percent sample of Phase I students.
- Administration of an attitude measure to a 22 percent sample of Phase I students.
- Administration of an attitude measure to Phase I classroom teachers.
- Administration of an attitude measure to all nine Phase I itinerant team members.

- Administration of a performance measure to an 11 percent sample of Phase II students.
- Administration of an attitude measure to an 11 percent sample of Phase II students.
- Administration of an attitude measure to all 30 Phase II teachers.
- Administration of an attitude measure to all 30 Phase III teachers.

2. Graduate Placement and COOP

- Preparation of a review and summary of Graduate Placement and COOP programs.

3. Project SET

- Administration of an attitude measure to a sample of Project SET students.
- Administration of an attitude measure to all Project SET staff.
- Telephone interviews with Project SET employers.
- Administration of an attitude questionnaire to a sample of Project SET parents.

C. 1973

The third evaluation study focused on Phase III of the Career Orientation program with less emphasis being placed on Phase I and Phase II. The Graduate Placement and COOP programs and Project SET also received less emphasis. The third study included a summary of the overall 3-year evaluation. The evaluation design consisted of:

1. Career Orientation

- Administration of an attitude questionnaire to a 10 percent sample of Phase I students.
- Administration of an attitude questionnaire to a sample of parents of Phase I students.

- Administration of an attitude measure to a 10 percent sample of Phase II students.
- Administration of an attitude measure to a sample of Phase II parents.
- Administration of a performance measure to an 8 percent sample of Phase III students.
- Administration of an attitude measure to an 8 percent sample of Phase III students.

2. Graduate Placement and COOP

- Administration of an attitude measure to a sample of students in the work experience program.
- Administration of an attitude measure to a sample of employers of work experience students.

3. Project SET

- Administration of an attitude questionnaire to a sample of Project SET students.
- Administration of an attitude questionnaire to a sample of employers of Project SET students.

V. RESULTS AND DISCUSSION

The results of the evaluation studies are discussed cumulatively by year by project component. A summary of the evaluation results for 1971 and 1972 will precede the discussion of the third year evaluation results.

A. Career Orientation

1. Phase I--6th Grade

a. 1971 Summary. A meeting between the evaluation staff and the three members of the itinerant team resulted in the following conclusions:

Three Phase I teachers seemed to have been asked to implement a large and complex program requiring extensive equipment, time, and planning to achieve the stated objectives. Although the teachers felt that the program had been somewhat effective, several important questions were raised: Is the program meeting the objectives originally stated? Are these objectives realistic? Are the specially arranged schedules being used effectively? Are students learning anything, or are they merely kept busy doing something different one day a week?

The concepts which provided direction for the curriculum were sacrificed in order to prepare activities which could be realistically implemented in the classes. Whether this situation was a result of realistic needs or a modification of the established objectives could not be stated at that time. Students seemed to respond to the notion that they were "not really in school" when they were participating in Career Orientation and were not able to relate their activities to any broad conceptual scheme linked to subsequent school activity. Career Orientation seemed to be more of an activity period rather than one step in a process of choosing a particular type of curriculum.

b. 1972 Summary. The project monitor selected 8 out of 15 schools to participate in this evaluation. The schools used in the sample represent a cross section of the socio-economic background of Phase I students. The 299 out of 1,320 pupils represent 22% of the total enrollment.

(1) Students' Performance. The results indicated that students performed well on the Phase I achievement test. The student mean of 19.97 represented a score equivalent to 77% of the items correct. The students evidently learned a large percentage of what the itinerant team intended to teach.

The data indicated that there were significant differences in performance of eight schools in Phase I. Students in the two highest scoring schools (West Liberty and Beechwood) averaged 86% and 85% of the test correct while the students in the two lowest scoring schools (Holmes and Forbes) averaged 60% and 62% of the test correct. It was recommended that project management investigate these differences in performance and attempt to determine if there are any unique conditions in these schools which might explain this variation in test scores.

Item analysis data revealed that there were some items on which there was wide variation across schools in the percentage of students selecting the correct response. This indicated that there were items which were more difficult for students in some schools than in others. Since the intent of the Phase I program was to teach the same material in each school, it was suggested that these wide variations on some items be investigated to determine if the content did differ by school.

There were no significant sex differences in performance on the Phase I achievement test. The program appeared to be equally effective for both boys and girls.

(2) Students' Attitude. Students liked the program and seemed to enjoy the activities in which they participated. Students' attitude was very positive on all the scaled items. On the open-ended items students indicated very few aspects of the program with which they were dissatisfied.

A Pearson product moment correlation coefficient was computed to determine the relationship between students' attitude toward Phase I and

students' performance on the Phase I achievement test. This analysis yielded a correlation coefficient of .29 which was significant at the .01 level. This indicated that there was a significant relationship between students' attitude toward Phase I and their performance on the Phase I achievement test.

(3) Classroom Teachers' Attitude Questionnaire. The Classroom teachers appeared to be satisfied with the overall concept and operation of the Phase I program. The responses suggested that students enjoyed the activities while learning some information about OVT and job opportunities. However, the lack of communication and coordination between the classroom teachers and the OVT teachers appeared to be one area where the program should be strengthened. If one of the program objectives was to establish a link between these classes, and such a mechanism had been built into the Phase I syllabus, then the process should have been operational. Instead of OVT functioning as a separate activity period where students create products and learn about jobs, they would be able to link OVT activities with their regular classroom experience. AIR suggested this process could be operational in two ways. One was to incorporate or set aside some time during in-service meetings for these teachers to meet and plan some strategies and activities. The other was to set aside a few minutes during the OVT team's visit to brief one another on the activities in each class and the anticipated plans for the coming week. Even if the teachers did not combine lesson plans, this would increase the interface between the two classes.

(4) Itinerant Teachers' Attitude. During the first evaluation of this program, the itinerant teachers expressed a desire to actively participate in curriculum changes and modifications. At that time, the evaluation was cited by AIR as an opportunity for these teachers to express their opinions about the program and to suggest changes for program improvement. Six new teachers were added to the itinerant group, making a total of nine. Yet only two members of these two teams completed this questionnaire.

c. 1973 Evaluation Results. This year an attitude questionnaire was administered to students in the Phase I program. The instruments were administered by members of the itinerant teams. The team members followed their normal teaching schedule and set aside time during their regular school visits to administer the attitude questionnaire.

(1) Students' Attitude. Project personnel selected the following 7 out of 17 participating schools in the Phase I program. The schools used in the sample represent a cross section of socio-economic background of Phase I students. The 192 students participating in the sample represent 10% of the total Phase I enrollment.

Table I identifies the seven participating schools, the mean total score by school, and the number of students sampled in each school.

Table I

Phase I
Attitude Data
Mean Total Score by School

School	Mean	Number
A. Leo Weil	20.35	37
West Liberty	18.52	21
Columbus	18.17	40
Madison	20.00	28
Beechwood	18.61	39
Miller	17.30	13
Holmes	19.21	14
Total	18.88	192

Attitude scores indicate that students enjoyed their initial experience in Career Orientation. The overall mean of 18.88 out of a possible 21 reveals that students liked the Phase I program. The data suggests that students in A. Leo Weil and Madison Schools enjoyed the program most and that students in Miller School enjoyed the program least.

Table 2 shows the mean subscore by school. The variance by item was low. Only one school on one item scored less than 2; this item asked students to indicate how well they learned how to get along with people.

Table 2

Phase I

Attitude Data
Mean Subscore by School

	A. Leo Weil (N=37)		West Liberty (N=21)		Columbus (N=40)		Madison (N=28)	
	M	N	M	N	M	N	M	N
Question 1	3.00	37	2.76	21	2.72	40	2.96	28
2	2.89	37	2.33	21	2.35	40	2.82	28
3	2.75	37	2.47	21	2.32	40	2.71	28
4	2.97	37	3.00	21	2.97	40	2.96	28
5	2.86	37	2.52	21	2.50	40	2.75	28
6	3.00	37	2.66	21	2.77	40	2.96	28
7	2.89	37	2.76	21	2.50	40	2.89	28

	Beechwood (N=39)		Miller (N=13)		Holmes (N=14)	
	M	N	M	N	M	N
Question 1	2.74	39	2.69	13	2.71	14
2	2.38	39	1.69	13	2.42	14
3	2.28	39	2.53	13	2.92	14
4	2.94	39	2.69	13	2.71	14
5	2.66	39	2.38	13	2.92	14
6	2.79	39	2.84	13	2.71	14
7	2.79	39	2.46	13	2.78	14

All other scores in all schools were above 2, which suggested that students felt very positively toward Phase I of the Career Orientation Program.

2. Phase II--7th Grade

a. 1971 Summary. There were 1,635 students involved in Phase II at the Washington and South Side Centers. The sample used for the evaluation consisted of 372 students from these centers, or a 23% sample.

(1) Students' Performance. Two characteristics of the data were worth noting. First, only four of the South Side students were exposed to all ten content areas. Were there unavoidable circumstances related to the initial period of implementation, or did program procedures need revision in order to ensure that all students received instruction in all areas? Secondly, the variation in item scores deserved investigation. Items which proved difficult for students at one Center also proved difficult for students at the other Center. These items needed to be reviewed to determine the nature of the difficulty, i.e., whether they contain ambiguities, whether they require knowledge which is not being taught, etc.

There was little variation in scores between males and females. Since one of the goals of the project was to expose students equally to content areas, the goal seems to have been achieved.

The changes recommended by the students were: (a) to eliminate the mart and keep the items produced in each area, and (b) to have more time in each content area so as to have an opportunity to try the various tasks within that area.

(2) Students' Attitude. Students liked the program and thought it helped them make curriculum selections for the next year. Indications of likes and dislikes combined with suggested changes raised the issue of the mart. AIR suggested that some questions needed to be answered about it. Why was it included in the curriculum? Should it receive the emphasis it seemed to? Was it complementary to the primary objective of the program? Should it be continued?

(3) Teachers' Attitude. The teachers are in a good position to pinpoint difficulties and identify aspects of the program which need to be modified for program improvement, such as the need for more relevant in-service training. The responses by the teachers raised some questions about the role teachers play in the development, implementation, and evaluation process. How should the experience of the teachers in a program be used for program improvement? What opportunities are provided by in-service training to achieve the objectives of the program? In what way can teachers most effectively accomplish program objectives?

Responses also raised questions about current program activities. Were all participants aware of program goals and objectives? How are problems encountered in implementation solved, or are they?

(4) Principals' Attitude. The principals of both the Washington Education Center and the South Side Education Center completed a questionnaire asking for their judgment concerning the impact of Career Orientation in each of their schools.

With the exception of one answer, the principals indicated that they believed Career Orientation was and had been successful in the schools, students enjoyed their participation in the program, they enjoyed having the program in their schools, and that the program had stimulated favorable parental interest and comment. The one exception was that one principal indicated an indecisiveness about whether classroom teachers thought the program was successful.

One principal suggested that Junior Achievement should only be a portion of the 8th grade curriculum and that course content emphasis should be on exploration rather than production. The latter remark correlated highly with both teachers' and students' recommendations.

b. 1972 Summary. Phase II student enrollment totaled 2,850. Eleven percent, or 325 students were sampled.

(1) Students' Performance. Mean student performance on the Phase II achievement test resulted in 61% of the items being answered correctly. One significant difference between the evaluation results of 1971

and 1972 could be seen in the proportion of students in the OVT Centers who received instruction in all content areas. In 1972, unless a feeder or home school joined the OVT program following the starting date, all students participating in Phase II received instruction in all content areas.

(2) Students' Attitude. Data from students' attitude questionnaires suggested that students enjoyed the Phase II activities. In addition, most students indicated that Phase II activities helped them to select the four subject areas they would like to explore further in Phase III. Only 4 out of 325 students said Phase II did not help make this decision; 203 students responded that it helped a lot.

The open-ended response items provided students the opportunity to indicate what they liked best and least about the program. Most students responded by stating which areas they enjoyed best or least. Some students suggested that the best aspect of Phase II was the chance to learn about career opportunities. This indicated that one of the major program objectives was achieved. Student responses were not as varied this year as last. The responses to aspects of the program enjoyed least by students were identifications of specific subject areas. No major trends were identified which indicated a general negative attitude about the program.

(3) Teachers' Attitude. The 15 out of 30 teachers who responded to the questionnaire seemed to regard the Career Orientation program professionally challenging and rewarding. Their responses indicated that they were interested in continual training in methods which would increase their effectiveness as teachers. The results also suggested that although they had been briefed in the middle school philosophy, the teachers had not received enough pragmatic tools with which to conduct and implement the objectives of Career Orientation. In addition to this questionnaire, informal conversations with some of these teachers throughout the course of this evaluation supported this general feeling. These teachers were embarking on a completely new and innovative learning situation which required innovative training in methods and strategies. A number of teachers stressed that in-service training should focus more on how to achieve program goals than on group dynamics and the philosophy of the middle school.

Because 50% of the respondents indicated that the syllabus was unsatisfactory, AIR suggested a review of the syllabus or the curriculum objectives should be conducted by project management. Teachers should be asked to cite specific incidents where the syllabus was unworkable in order to supply information for useful revisions.

c. 1973 Evaluation Results.

(1) Students' Attitude. This year attitude questionnaires were administered to 272 out of 2,736 Phase II students in the five OVT Centers. This represents a 10% sample of students participating in the Phase II program. The teachers in each of the OVT Centers administered the questionnaires to their students.

Table 3 summarizes the questionnaire data by OVT Center and overall. Within a range of three choices, each assigned a numeric value (1-3, with 3 the most positive), students were to indicate their attitude toward selected segments of the Phase II program. Data from the students' attitude questionnaires suggested that students enjoyed the Phase II activities. All of the overall item mean scores were above 2. In addition, the vast majority of students indicated that Phase II activities helped them to select the four subject areas they would like to explore further in Phase II. Only 9 out of 272 students said Phase II did not help them to make this decision; 180 students responded that it helped a lot.

Tables 4, 5, 6, 7, and 8 on the following pages present the mean score by item by school by OVT Center. The information summarized in the preceding paragraph is extended to this form for the reader interested in individual schools within the OVT Centers.

(2) Parents' Attitude. This year, at the request of the Project Monitor, questionnaires were submitted to parents of students enrolled in the Phase I and Phase II programs. AIR mailed a total of 344 questionnaires to a list of 344 parents submitted by OVT. Only 44 questionnaires, or 12% were returned. Responses on those questionnaires received from the parents of students enrolled in the OVT program were generally positive; the parents indicated that the program helped their children.

Table 3

Phase II

Summary of Student Questionnaire Data
by Center plus Overall Mean

The following scaled items are included in the attitudinal questionnaire:

Items

1 - 3 offered these choices:

Agree (3) It was OK (2) Disagree (1)

		South Side	Washington	Arsenal	Oliver	McNaugher	Overall Mean
1.	Business Education						
a.	Choice 1	3	5	3	1	5	
	2	27	43	46	15	25	2.90
	3	52	43	27	15	20	
b.	Choice 1	4	5	11	0	10	
	2	24	19	16	3	9	2.30
	3	54	67	49	28	31	
c.	Choice 1	7	7	7	1	14	
	2	22	27	21	8	11	2.51
	3	53	57	48	22	25	
d.	Choice 1	13	10	18	7	9	
	2	21	28	14	4	8	2.43
	3	50	54	44	20	33	
e.	Choice 1	7	11	8	2	8	
	2	14	23	19	7	10	2.56
	3	61	56	49	22	32	
2.	Home Economics						
a.	Choice 1	7	8	2	1	3	
	2	25	30	42	13	16	2.48
	3	47	53	32	17	30	
b.	Choice 1	4	9	13	1	9	
	2	23	21	19	2	15	2.53
	3	52	60	44	28	25	
c.	Choice 1	9	10	8	2	5	
	2	19	28	20	9	15	2.51
	3	52	51	48	20	29	
d.	Choice 1	15	12	20	5	12	
	2	21	38	28	8	11	2.28
	3	42	41	28	18	26	
e.	Choice 1	11	22	8	1	6	
	2	13	21	21	5	8	2.50
	3	55	48	47	25	35	
3.	Industrial Arts						
a.	Choice 1	1	10	5	2	4	
	2	25	36	22	7	21	2.52
	3	54	44	49	22	24	
b.	Choice 1	10	8	7	0	7	
	2	21	30	17	10	16	2.52

c.	Choice 1	7	7	7	1	14	
	2	22	27	21	8	11	2.51
	3	53	57	48	22	25	
d.	Choice 1	13	10	18	7	9	
	2	21	28	14	4	8	2.43
	3	50	54	44	20	33	
e.	Choice 1	7	11	8	2	8	
	2	14	23	19	7	10	2.56
	3	61	56	49	22	32	
2. Home Economics							
a.	Choice 1	7	8	2	1	3	
	2	25	30	42	13	16	2.48
	3	47	53	32	17	30	
b.	Choice 1	4	9	13	1	9	
	2	23	21	19	2	15	2.53
	3	52	60	44	28	25	
c.	Choice 1	9	10	8	2	5	
	2	19	28	20	9	15	2.51
	3	52	51	48	20	29	
d.	Choice 1	15	12	20	5	12	
	2	21	38	28	8	11	2.28
	3	42	41	28	18	26	
e.	Choice 1	11	22	8	1	6	
	2	13	21	21	5	8	2.50
	3	55	48	47	25	35	
3. Industrial Arts							
a.	Choice 1	1	10	5	2	4	
	2	25	36	22	7	21	2.52
	3	54	44	49	22	24	
b.	Choice 1	10	8	7	0	7	
	2	21	30	17	10	16	2.52
	3	50	52	52	21	26	
c.	Choice 1	10	7	2	2	3	
	2	13	34	22	9	13	2.57
	3	57	48	52	20	33	
e.	Choice 1	6	11	13	2	9	
	2	16	31	19	5	5	2.51
	3	58	47	44	24	35	

Item

4 offered these choices:

It helped a lot (3) It helped a little (2) It didn't help (1)

		South Side	Washington	Arsenal	Oliver	McNaugher	Overall Mean
4.	Choice 1	1	2	4	0	2	
	2	14	18	28	5	18	2.63
	3	51	54	30	24	21	

Table 4

Phase II

Attitude Data
Subscore by Home School
Washington

	St. Joseph (N=1)		Frick (N=2)		Sunnyside (N=3)		Lawrenceville Catholic (N=2)	
	M	N	M	N	M	N	M	N
Question 1a	2.00	1	2.00	2	2.66	3	2.00	2
b	3.00	1	2.50	2	2.66	3	3.00	2
c	1.00	1	2.50	2	2.66	3	2.50	2
d	2.00	1	3.00	2	2.33	3	3.00	2
e	3.00	1	2.50	2	2.33	3	2.50	2
2a	2.00	1	2.50	2	2.66	3	1.00	2
b	1.00	1	2.50	2	2.66	3	1.00	2
c	2.00	1	2.50	2	2.66	3	1.00	2
d	2.00	1	3.00	2	2.00	3	1.00	2
e	3.00	1	2.50	2	2.66	3	1.00	2
3a	3.00	1	2.00	2	2.00	3	1.00	2
b	2.00	1	2.50	2	2.33	3	2.00	2
c	2.00	1	2.00	2	2.33	3	2.00	2
e	3.00	1	2.50	2	2.33	3	2.00	2
4	3.00	1	2.50	2	3.00	3	3.00	2

	Liberty (N=4)		Fulton (N=8)		Greenfield (N=12)		St. Mary's (N=14)	
	M	N	M	N	M	N	M	N
Question 1a	2.25	4	2.12	8	2.50	12	2.83	14
b	2.50	4	3.00	8	2.41	12	2.85	14
c	3.00	4	2.75	8	2.58	12	2.71	14
d	1.75	4	1.87	8	2.58	12	2.64	14
e	2.00	4	2.62	8	2.33	12	2.64	14
2a	2.25	4	3.00	8	2.75	12	2.71	14
b	2.50	4	2.87	8	2.66	12	2.71	14
c	2.75	4	2.75	8	2.50	12	2.71	14
d	2.25	4	1.87	8	2.75	12	2.42	14
e	2.00	4	2.75	8	2.50	12	2.50	14
3a	3.00	3	2.37	8	2.66	12	2.42	14
b	2.66	3	2.50	8	2.66	12	2.50	14

	M	N	M	N	M	N	M	N	
Question 1a	2.25	4	2.12	8	2.50	12	2.83	14	
b	2.50	4	3.00	8	2.41	12	2.85	14	
c	3.00	4	2.75	8	2.58	12	2.71	14	
d	1.75	4	1.87	8	2.58	12	2.64	14	
e	2.00	4	2.62	8	2.33	12	2.64	14	
2a	2.25	4	3.00	8	2.75	12	2.71	14	
b	2.50	4	2.87	8	2.66	12	2.71	14	
c	2.75	4	2.75	8	2.50	12	2.71	14	
d	2.25	4	1.87	8	2.75	12	2.42	14	
e	2.00	4	2.75	8	2.50	12	2.50	14	
3a	3.00	3	2.37	8	2.66	12	2.42	14	
b	2.66	3	2.50	8	2.66	12	2.50	14	
c	3.00	3	2.62	8	2.66	12	2.71	14	
e	3.00	3	2.37	8	2.50	12	2.50	14	
4	3.00	3	2.66	8	2.80	10	2.61	13	

	Rogers (N=15)		Lemington (N=31)	
	M	N	M	N
Question 1a	2.60	15	2.43	30
b	2.66	15	2.63	30
c	2.60	15	2.40	30
d	2.60	15	2.53	30
e	2.66	15	2.36	30
2a	2.33	15	2.36	30
b	2.60	15	2.51	29
c	2.40	15	2.34	29
d	2.26	15	2.33	30
e	2.20	15	2.06	30
3a	2.33	15	2.33	30
b	2.73	15	2.36	30
c	2.46	15	2.23	30
e	2.53	15	2.20	30
4	2.72	11	2.65	23

Table 5

Phase II

Attitude Data
Subscore by Home School
South Side

	St. Regis (N=1)		Mt. Oliver (N=3)		St. Martin's (N=4)		Beechwood (N=4)	
	M	N	M	N	M	N	M	N
Question 1a	3.00	1	3.00	3	3.00	4	2.00	4
b	3.00	1	3.00	3	2.25	4	2.50	4
c	3.00	1	3.00	3	2.75	4	2.25	4
d	3.00	1	2.33	3	2.75	4	2.25	4
e	3.00	1	2.66	3	2.50	4	2.50	4
2a	2.00	1	3.00	3	2.25	4	2.50	4
b	3.00	1	3.00	3	3.00	4	2.50	4
c	3.00	1	3.00	3	2.50	4	2.00	4
d	3.00	1	2.00	3	2.75	4	2.25	4
e	1.00	1	3.00	3	2.50	4	2.75	4
3a	2.00	1	2.66	3	3.00	4	2.75	4
b	1.00	1	3.00	3	2.50	4	3.00	4
c	3.00	1	3.00	3	2.75	4	2.75	4
e	1.00	1	3.00	3	3.00	4	2.50	4
4	3.00	1	3.00	3	3.00	2	2.00	2

	West Liberty (N=8)		Thad. Stevens (N=7)		Holmes (N=8)		St. Joseph (N=9)	
	M	N	M	N	M	N	M	N
Question 1a	2.50	8	2.85	7	2.62	8	2.66	9
b	2.87	8	2.85	7	2.62	8	2.33	9
c	2.75	8	2.57	7	2.75	8	2.55	9
d	2.75	8	2.71	7	2.50	8	2.22	9
e	3.00	8	2.71	7	3.00	8	2.55	9
2a	2.25	8	3.00	7	2.75	8	2.11	9
b	2.75	8	2.71	7	2.50	8	2.33	9
c	2.87	8	2.57	7	2.37	8	2.33	9
d	2.37	8	2.42	7	2.12	8	2.22	9
e	2.87	8	2.00	7	2.75	8	2.44	9
3a	2.75	8	2.85	7	2.62	8	2.66	9

Question	1a	2.50	8	2.85	7	2.62	8	2.66	9
	b	2.87	8	2.85	7	2.62	8	2.33	9
	c	2.75	8	2.57	7	2.75	8	2.55	9
	d	2.75	8	2.71	7	2.50	8	2.22	9
	e	3.00	8	2.71	7	3.00	8	2.55	9
	2a	2.25	8	3.00	7	2.75	8	2.11	9
	b	2.75	8	2.71	7	2.50	8	2.33	9
	c	2.87	8	2.57	7	2.37	8	2.33	9
	d	2.37	8	2.42	7	2.12	8	2.22	9
	e	2.87	8	2.00	7	2.75	8	2.44	9
	3a	2.75	8	2.85	7	2.62	8	2.66	9
	b	2.62	8	2.42	7	2.62	8	2.88	9
	c	2.62	8	2.42	7	2.62	8	2.44	9
	e	2.87	8	2.28	7	2.50	8	2.77	9
	4	2.75	8	2.71	7	3.00	5	2.66	6

		Overbrook (N=16)		Brookline (N=11)		Fifth Avenue (N=10)	
		M	N	M	N	M	N
Question	1a	2.75	16	2.09	11	2.60	10
	b	2.75	16	2.36	11	2.50	10
	c	2.75	16	2.63	11	1.80	10
	d	2.68	16	1.63	11	2.50	10
	e	2.68	16	2.63	11	2.20	10
	2a	2.80	15	2.18	11	2.50	10
	b	2.60	15	2.63	11	2.50	10
	c	2.33	15	2.81	11	2.60	10
	d	2.73	15	1.81	11	2.40	10
	e	2.60	15	2.63	11	2.50	10
	3a	2.53	15	2.63	11	2.60	10
	b	2.40	15	2.18	11	2.10	10
	c	2.66	15	2.63	11	2.30	10
	e	2.46	15	2.81	11	2.70	10
	4	2.86	15	2.72	11	2.00	6

Table 6

Phase II

Attitude Data
Subscore by Home School
Oliver

	Columbus Middle (N=22)		St. Gabriel's (N=9)	
	M	N	M	N
Question 1a	2.45	22	2.44	9
b	2.90	22	2.88	9
c	2.77	22	2.66	9
d	2.27	22	2.44	9
e	2.77	22	2.33	9
2a	2.54	22	2.44	9
b	2.95	22	2.66	9
c	2.59	22	2.55	9
d	2.31	22	2.66	9
e	2.81	22	2.66	9
3a	2.77	22	2.33	9
b	2.68	22	2.66	9
c	2.45	22	2.88	9
e	2.81	22	2.44	9
4	2.80	16	2.88	9

Table 7

Phase II

Attitude Data
Subscore by Home School
Arsenal

	Sterrett (N=8)		Park Place (N=11)		Colfax (N=19)		Arsenal (N=38)	
	M	N	M	N	M	N	M	N
Question 1a	2.12	8	2.45	11	2.15	19	2.39	38
b	2.50	8	2.63	11	2.00	19	2.68	38
c	2.62	8	2.90	11	2.31	19	2.52	38
d	2.62	8	2.45	11	1.94	19	2.47	38
e	2.62	8	2.72	11	2.26	19	2.60	38
2a	2.37	8	2.36	11	2.26	19	2.47	38
b	2.37	8	2.54	11	2.05	19	2.55	38
c	2.75	8	2.18	11	2.52	19	2.57	38
d	2.12	8	2.36	11	1.63	19	2.31	38
e	2.50	8	2.63	11	2.42	19	2.52	38
3a	2.62	8	2.36	11	2.57	19	2.63	38
b	3.00	8	2.36	11	2.63	19	2.55	38
c	2.87	8	2.72	11	2.68	19	2.55	38
e	2.62	8	2.45	11	2.36	19	2.39	38
4	2.37	8	2.63	11	2.41	17	2.30	26

Table 8

Phase II

Attitude Data
Subscore by Home School
McNaugher

	McNaugher (N=50)	
	M	N
Question 1a	2.90	50
b	2.38	50
c	2.22	50
d	2.48	50
e	2.48	50
2a	2.55	49
b	2.32	49
c	2.48	49
d	2.89	49
e	2.59	49
3a	2.40	49
b	2.38	49
c	2.59	49
e	2.53	49
4	2.52	40

Eight parents stated that it was a good program. Reasons why parents liked the program were that the program gave the students some knowledge about career opportunities, it helped prepare them for future jobs, and aided in making decisions about these jobs. In addition, it enabled students to gain experiences beyond those provided in the normal curriculum. Many parents felt the program was useful enough to be a requirement for all students. Two negative parents' comments indicated that the program had too much variety and therefore was not helpful.

Some students discussed OVT at home. In so doing, they usually mentioned OVT activities; sometimes they commented about special events of a day. Nine parents stated that their children found OVT very enjoyable and liked the knowledge they acquired and the opportunity of talking about occupational opportunities. Parents stated that students learned about the world of work. Four parents indicated that the program assisted their children in focusing on career goals. A few parents stated that the relationship between OVT and occupational opportunities was not discussed at home.

Parents responded favorably that the OVT Exploratory Program had been helpful to their children. Seven parents stated that the program gave the students new and varied ideas about careers. Three stated it was a change of pace from the normal school curriculum. Others thought that the experience allowed their students an opportunity to be creative and develop skills, gain new experiences, and learn useful and interesting things to do. A few parents liked OVT because it taught their children things which the parents are not equipped to teach. A few parents stated that the OVT Exploratory Program was least helpful because it attempted to cover too many topics in a short time.

Parents suggested a few changes which they thought could improve the program. For example, they suggested that the scope of the program be reduced and the length of time alloted for subjects and projects be increased. In addition, they recommended program expansion to more grades in more schools with perhaps a follow-up of on-the-job experience.

3. Phase III-8th Grade

a. 1971 Summary. Because Phase III was not operational in 1971, no evaluation effort was directed toward this segment of the Career Orientation Program.

b. 1972 Summary. Phase III was staffed by the same 30 teachers who staffed Phase II. The only data received about Phase III came from these teachers' responses to an attitude questionnaire.

The training preferences and the in-service training were almost identical to those expressed for Phase II. The course syllabus was unsatisfactory for most teachers.

As with Phase II, the teachers appeared to be very interested and challenged by the Career Orientation Program. They were willing to invest their time and talent to achieving the program objectives, but they were not always clear about what those objectives really were. The training sessions did not seem to offer practical suggestions for teaching this innovative program for career exploration.

One apparent difference between Phase II and Phase III was the group instruction received in Phase II compared to the self-contained learning activity packages used in Phase III. Although the concept of a business organization seemed to work successfully in Phase II, teachers suggested it might not be appropriate for Phase III. The teachers also indicated that the retailing activity built into Phase III was the least effective aspect of the program. Informal conversations with the teachers indicated that this situation was one which project management and the teaching staff were aware of and an attempt was being made to select an alternative strategy.

c. 1973 Evaluation Results. Each year, when the evaluation study focused on a new component of the vocational counseling program, it was necessary to develop additional instruments. Continuing with the interactive evaluation process, project staff members and the evaluation staff worked together to build these instruments. Phase III was fully operational during this year's evaluation study and received the primary focus. Therefore, a students' performance measure was created from items submitted by teachers to AIR, where they were edited and developed into the final evaluation instrument. The students' attitude questionnaire used in previous evaluations for Phase II was also administered to a sample of Phase III students participating in the evaluation.

The AIR Project Director visited each of the sites where the evaluation was conducted and discussed the administration of the instruments with the OVT Center administrator. The evaluation instruments were then turned over by the administrator to the teachers who administered them to the students. By so doing, the normal school operations were minimally disrupted because the teachers arranged the evaluation in the way most compatible with their schedules. The following OVT Centers participated in the evaluation: Arsenal, South Side, Washington, Oliver, and McNaugher.

The total number of students sampled was 222; this represents 8% of the total Phase III student enrollment. Table 9 shows a breakdown of the mean total achievement scores by OVT Center.

Table 9

Phase III

Achievement Data

Mean Total Score by OVT Center

School	Mean	Number
Arsenal	29.77	45
Oliver	31.11	30
McNaugher	24.06	52
South Side	29.74	34
Washington	26.60	61

(1) Students' Performance. The overall mean score achieved by students was 28.25 out of a total possible score of 50. Students correctly responded to approximately 56% of the items. It should be remembered that not all students answered all items on the test because not all students were exposed to all the occupational areas included on the test. Phase III students enrolled in a limited number (usually four) of the total of ten areas in which instruction was offered. The breakdown of the number of students in each home school who answered each occupational area is shown later in this section. As can be seen in the above table, differences in total scores exist among the OVT Centers. McNaugher scored the lowest while Oliver scored the highest.

Table 10 presents the achievement test scores by OVT Center. Last year, students in the four OVT Centers participating in the evaluation achieved their highest scores in Community Services and Foods & Nutrition. This year, students in three out of five Centers scored highest on Community Services; students in three Centers received one of their two highest scores in Clothing & Textiles, and Merchandising. The schools were scattered in recording low scores; the only pattern was reflected in three out of five OVT Centers where the lowest scores were obtained in Visual Communications.

Table 11 presents the number of students within each OVT Center who responded to questions with each occupational area. The two most popular areas chosen by students seemed to be Clothing & Textiles, and Foods & Nutrition. The area chosen by the fewest students seemed to be Visual Communications.

The data have been broken down further in subsequent tables. Tables 12, 13, 14, 15, and 16 show the achievement test subscore by home school within each OVT Center. Tables 17, 18, 19, 20, and 21 show the number of students in each home school within each OVT Center who responded to items in each occupational area.

(2) Students' Attitudes. Data from students' attitude questionnaires suggest that students enjoyed the Phase III activities. Tables 22, 23, 24, 25, and 26 show the breakdown of students' responses by item by home school by OVT Center. Within a range of three choices, each assigned a numberical value (1-3, with 3 the most positive), the vast majority of overall items mean scores was over 2. In addition, the majority of students indicated that OVT had helped them choose a course of study for the next year.

Table 10

Phase III

Achievement Test
Subscore by OVT Center

	Arsenal		South Side		Washington		Oliver		McNaughe r	
	M	N	M	N	M	N	M	N	M	N
Clothing & Textiles	3.58	43	3.47	23	3.27	61	3.57	26	2.91	49
Community Services	3.32	34	4.10	29	3.74	50	4.57	14	2.82	50
Foods & Nutrition	2.75	45	2.32	34	2.51	37	2.86	30	2.11	52
Manufacturing	2.66	33	2.52	17	2.15	46	2.77	9	1.91	49
Construction	2.97	26	3.32	31	2.76	38	2.61	13	3.18	49
Power & Transportation	2.67	28	2.33	18	2.27	48	2.85	20	1.93	46
Visual Communications	2.74	27	2.60	23	1.80	25	2.33	18	1.80	45
Merchandising	3.60	20	3.31	19	3.40	37	3.84	25	2.70	47
Business Communications	2.51	29	3.07	26	2.01	52	2.52	25	1.89	47
Information Processing	2.97	34	2.70	17	2.69	33	3.19	21	2.81	44

Table II

Phase III

Achievement Test
Number of Students per OVT Center Answering each Area

	Arsenal	Oliver	McNaugher	South Side	Washington
Clothing & Textiles	43	26	49	23	61
Community Services	34	14	50	29	50
Foods & Nutrition	45	30	52	34	37
Manufacturing	33	9	49	17	46
Construction	26	13	49	31	38
Power & Transportation	28	20	46	18	48
Visual Communications	27	18	45	23	25
Merchandising	20	25	47	19	37
Business Communications	29	25	47	26	52
Information Processing	34	21	44	17	33

Table 12

Phase III

Achievement Test
Subscore by Home School
Washington

	Morningside (N=7)		St. Raphael's (N=11)		St. Kieran's (N=2)	
	M	N	M	N	M	N
Clothing & Textiles	3.50	6	4.00	7	3.00	1
Community Services	4.33	3	4.83	6	----	-
Foods & Nutrition	3.00	2	4.33	3	3.00	1
Manufacturing	2.80	5	2.50	4	3.00	2
Construction	3.50	4	3.50	4	2.50	2
Power & Transportation	3.42	7	2.20	5	1.00	1
Visual Communications	2.00	2	2.75	4	----	-
Merchandising	3.00	3	4.00	3	----	-
Business Communications	2.50	4	2.00	8	4.00	1
Information Processing	2.50	2	3.40	5	----	-

	Greenfield (N=4)		St. Stephen's (N=4)		Fulton (N=5)	
	M	N	M	N	M	N
Clothing & Textiles	2.00	1	2.00	1	2.40	5
Community Services	5.00	1	4.00	2	3.66	3
Foods & Nutrition	2.00	1	1.00	2	2.50	2
Manufacturing	0.00	1	2.33	3	2.66	3
Construction	----	0	3.00	2	4.00	2
Power & Transportation	1.00	2	2.50	2	2.33	3
Visual Communications	1.00	1	1.50	2	1.50	2

	Greenfield (N=4)		St. Stephen's (N=4)		Fulton (N=5)	
	M	N	M	N	M	N
Clothing & Textiles	2.00	1	2.00	1	2.40	5
Community Services	5.00	1	4.00	2	3.66	3
Foods & Nutrition	2.00	1	1.00	2	2.50	2
Manufacturing	0.00	1	2.33	3	2.66	3
Construction	----	0	3.00	2	4.00	2
Power & Transportation	1.00	2	2.50	2	2.33	3
Visual Communications	1.00	1	1.50	2	1.50	2
Merchandising	2.50	2	3.00	1	4.66	3
Business Communications	1.66	3	----	0	2.00	3
Information Processing	1.00	1	----	0	3.00	3

	St. Joseph's (N=3)		Lemington (N=2)		Lawrenceville Catholic (N=5)	
	M	N	M	N	M	N
Clothing & Textiles	3.00	1	----	0	5.00	3
Community Services	5.00	1	----	0	4.00	1
Foods & Nutrition	----	0	2.00	1	2.66	3
Manufacturing	2.00	2	2.00	1	3.00	1
Construction	4.00	2	2.00	1	5.00	1
Power & Transportation	3.33	3	2.00	1	3.50	4
Visual Communications	----	0	----	0	2.00	2
Merchandising	----	0	2.00	1	4.00	1
Business Communications	2.50	2	----	0	1.00	1
Information Processing	2.00	1	----	0	4.00	1

	St. Rosalia (N=4)		East Hills (N=16)		St. Mary's (N=15)	
	M	N	M	N	M	N
Clothing & Textiles	4.50	2	2.76	13	3.00	8
Community Services	5.00	2	3.41	12	2.75	4
Foods & Nutrition	----	0	2.53	13	3.00	2
Manufacturing	1.00	1	1.77	9	1.50	6
Construction	2.00	2	2.20	10	1.66	3
Power & Transportation	----	0	1.87	8	1.75	8
Visual Communications	3.00	1	1.00	5	2.00	1
Merchandising	3.66	3	3.60	10	3.33	6
Business Communications	2.25	4	2.00	9	1.42	7
Information Processing	4.00	1	2.12	8	2.57	7

	Rogers (N=19)		Dilworth (N=1)	
	M	N	M	N
Clothing & Textiles	3.46	13	----	-
Community Services	3.35	14	3.00	1
Foods & Nutrition	1.85	7	----	-
Manufacturing	2.42	7	2.00	1
Construction	2.40	5	----	-
Power & Transportation	1.00	4	----	-
Visual Communications	1.80	5	----	-
Merchandising	2.50	4	----	-
Business Communications	2.11	9	2.00	1
Information Processing	3.00	4	----	-

Information Processing	4.00	1	2.12	8	2.57	7

	Rogers (N=19)		Dilworth (N=1)	
	M	N	M	N
Clothing & Textiles	3.46	13	----	-
Community Services	3.35	14	3.00	1
Foods & Nutrition	1.85	7	----	-
Manufacturing	2.42	7	2.00	1
Construction	2.40	5	----	-
Power & Transportation	1.00	4	----	-
Visual Communications	1.80	5	----	-
Merchandising	2.50	4	----	-
Business Communications	2.11	9	2.00	1
Information Processing	3.00	4	----	-

Table 13

Phase III

Achievement Test
Subscore by Home School
Arsenal

	Holy Rosary (N=3)		St. Bede (N=30)		Arsenal Middle (N=47)	
	M	N	M	N	M	N
Clothing & Textiles	3.33	3	4.50	8	3.34	32
Community Services	3.00	1	4.57	7	3.00	26
Foods & Nutrition	1.00	2	3.33	18	2.48	25
Manufacturing	----	-	2.26	19	1.71	14
Construction	----	-	3.40	15	2.36	11
Power & Transportation	2.50	2	3.18	16	1.90	10
Visual Communications	4.00	1	3.00	16	2.20	10
Merchandising	----	-	5.00	2	3.44	18
Business Communications	0.50	2	3.11	9	2.44	18
Information Processing	----	-	3.37	8	2.84	26

Table 14

Phase III

Achievement Test
Subscore by Home School
South Side

	St. Agnes (N=2)		Mt. Oliver (N=9)		Brookline (N=8)	
	M	N	M	N	M	N
Clothing & Textiles	4.00	1	2.50	2	4.80	5
Community Services	2.50	2	4.14	7	4.75	4
Foods & Nutrition	----	-	1.83	6	2.66	6
Manufacturing	----	-	2.00	3	3.00	2
Construction	1.00	1	2.80	5	4.33	3
Power & Transportation	----	-	2.33	3	----	-
Visual Communications	2.00	1	2.40	5	3.00	2
Merchandising	4.00	1	2.00	1	3.50	4
Business Communications	3.00	1	5.00	1	3.14	7
Information Processing	4.00	1	3.00	3	----	-

	Beechwood (N=22)		Overbrook (N=11)		West Liberty (N=7)	
	M	N	M	N	M	N
Clothing & Textiles	3.00	8	3.75	4	2.66	3
Community Services	4.00	9	4.40	5	4.00	2
Foods & Nutrition	2.07	13	2.80	5	2.75	4
Manufacturing	2.57	7	1.00	1	3.00	4
Construction	2.83	12	4.60	5	3.60	5
Power & Transportation	2.25	8	2.25	4	2.66	3
Visual Communications	2.37	8	3.00	1		

	[illegible] (N=5)		Mt. Oliver (N=9)		Brookline (N=8)	
	M	N	M	N	M	N
Clothing & Textiles	4.00	1	2.50	2	4.80	5
Community Services	2.50	2	4.14	7	4.75	4
Foods & Nutrition	----	-	1.83	6	2.66	6
Manufacturing	----	-	2.00	3	3.00	2
Construction	1.00	1	2.80	5	4.33	3
Power & Transportation	----	-	2.33	3	----	-
Visual Communications	2.00	1	2.40	5	3.00	2
Merchandising	4.00	1	2.00	1	3.50	4
Business Communications	3.00	1	5.00	1	3.14	7
Information Processing	4.00	1	3.00	3	----	-

	Beechwood (N=22)		Overbrook (N=11)		West Liberty (N=7)	
	M	N	M	N	M	N
Clothing & Textiles	3.00	8	3.75	4	2.66	3
Community Services	4.00	9	4.40	5	4.00	2
Foods & Nutrition	2.07	13	2.80	5	2.75	4
Manufacturing	2.57	7	1.00	1	3.00	4
Construction	2.83	12	4.60	5	3.60	5
Power & Transportation	2.25	8	2.25	4	2.66	3
Visual Communications	2.37	8	3.00	4	3.00	3
Merchandising	2.40	5	3.66	3	4.00	5
Business Communications	2.63	11	3.00	3	4.00	3
Information Processing	2.70	10	1.00	2	4.00	1

Table 15

Phase III

Achievement Test
Subscore by Home School
Oliver

	Columbus (N=41)	
	M	N
Clothing & Textiles	3.57	26
Community Services	4.57	14
Foods & Nutrition	2.86	30
Manufacturing	2.77	9
Construction	2.61	13
Power & Transportation	2.85	20
Visual Communications	2.33	18
Merchandising	3.84	25
Business Communications	2.52	25
Information Processing	3.19	21

Table 16

Phase III

Achievement Test
Subscore by Home School
McNaugher

	McNaugher (N=54)	
	M	N
Clothing & Textiles	2.91	49
Community Services	2.82	50
Foods & Nutrition	2.11	52
Manufacturing	1.91	49
Construction	3.18	49
Power & Transportation	1.93	46
Visual Communications	1.80	45
Merchandising	2.70	47
Business Communications	1.89	47
Information Processing	2.81	44

Table 17

Phase III

Achievement Test
Number of Students per School Answering each Area
Washington

	Morningside (N=7)	St. Raphael's (N=11)	St. Kieran's (N=2)
Clothing & Textiles	6	7	1
Community Services	3	6	0
Foods & Nutrition	2	3	1
Manufacturing	5	4	2
Construction	4	4	2
Power & Transportation	7	5	1
Visual Communications	2	4	0
Merchandising	3	3	0
Business Communications	4	8	1
Information Processing	2	5	0

	St. Joseph's (N=3)	Lemington (N=2)	Lawrenceville Catholic (N=5)
Clothing & Textiles	1	0	3
Community Services	1	0	1
Foods & Nutrition	0	1	3
Manufacturing	2	1	1
Construction	2	1	1
Power & Transportation	3	1	4
Visual Communications	0	0	2
Merchandising	0	1	1
Business Communications	2	0	1
Information Processing	1	0	1

	Greenfield (N=4)	St. Stephen's (N=4)	Fulton (N=5)

Visual Communications	2	4	0
Merchandising	3	3	0
Business Communications	4	8	1
Information Processing	2	5	0

65

	St. Joseph's (N=3)	Lemington (N=2)	Lawrenceville Catholic (N=5)
Clothing & Textiles	1	0	3
Community Services	1	0	1
Foods & Nutrition	0	1	3
Manufacturing	2	1	1
Construction	2	1	1
Power & Transportation	3	1	4
Visual Communications	0	0	2
Merchandising	0	1	1
Business Communications	2	0	1
Information Processing	1	0	1

66

	Greenfield (N=4)	St. Stephen's (N=4)	Fulton (N=5)
Clothing & Textiles	1	1	5
Community Services	1	2	3
Foods & Nutrition	1	2	2
Manufacturing	1	3	3
Construction	0	2	2
Power & Transportation	2	2	3
Visual Communications	1	2	2
Merchandising	2	1	3
Business Communications	3	0	3
Information Processing	1	0	3

	St. Rosalia (N=4)	East Hills (N=16)	St. Mary's (N=15)
Clothing & Textiles	2	13	8
Community Services	2	12	4
Foods & Nutrition	0	13	2
Manufacturing	1	9	6
Construction	2	10	3
Power & Transportation	0	8	8
Visual Communications	1	5	1
Merchandising	3	10	6
Business Communications	4	9	7
Information Processing	1	8	7

9263

	Roger's (N=19)	Dilworth (N=1)
Clothing & Textiles	13	0
Community Services	14	1
Foods & Nutrition	7	0
Manufacturing	7	1
Construction	5	0
Power & Transportation	4	0
Visual Communications	5	0
Merchandising	4	0
Business Communications	9	1
Information Processing	4	0

Table 18

Phase III

Achievement Test
Number of Students per School Answering each Area

Arsenal

	Holy Rosary (N=3)	St. Bede (N=30)	Arsenal Middle (N=47)
Clothing & Textiles	3	8	32
Community Services	1	7	26
Foods & Nutrition	2	18	25
Manufacturing	0	19	14
Construction	0	15	11
Power & Transportation	2	16	10
Visual Communications	1	16	10
Merchandising	0	2	18
Business Communications	2	9	18
Information Processing	0	8	26

Table 19

Phase III

Achievement Test
Number of Students per School Answering each Area
South Side

	St. Agnes (N=2)	Mt. Oliver (N=9)	Brookline (N=8)
Clothing & Textiles	1	2	5
Community Services	2	7	4
Foods & Nutrition	0	6	6
Manufacturing	0	3	2
Construction	1	5	3
Power & Transportation	0	3	0
Visual Communications	1	5	2
Merchandising	1	1	4
Business Communications	1	1	7
Information Processing	1	3	0

	Overbrook (N=11)	Beechwood (N=22)	West Liberty (N=7)
Clothing & Textiles	4	8	3
Community Services	5	9	2
Foods & Nutrition	5	13	4
Manufacturing	1	7	4
Construction	5	12	5
Power & Transportation	4	8	3
Visual Communications	4	8	3
Merchandising	3	5	5
Business Communications	3	11	3
Information Processing	2	10	1

Table 20

Phase III

Achievement Test
Number of Students per School Answering each Area
Oliver

	Columbus (N=41)
Clothing & Textiles	26
Community Services	14
Foods & Nutrition	30
Manufacturing	9
Construction	13
Power & Transportation	20
Visual Communications	18
Merchandising	25
Business Communications	25
Information Processing	21

Table 21

Phase III

Achievement Test
Number of Students per School Answering each Area
McNaugher

	McNaugher (N=54)
Clothing & Textiles	49
Community Services	50
Foods & Nutrition	52
Manufacturing	49
Construction	49
Power & Transportation	46
Visual Communications	45
Merchandising	47
Business Communications	47
Information Processing	44

Table 22

Phase III

Attitude
Subscore by Home School
Washington

	Morningside (N=7)		St. Raphael's (N=11)		St. Kieran (N=2)	
	M	N	M	N	M	N
Question 1a	2.00	7	2.00	10	2.00	2
b	2.71	7	2.80	10	2.00	2
c	2.42	7	2.50	10	2.00	2
d	2.14	7	1.90	10	1.00	2
2a	2.00	6	2.10	10	2.00	2
b	2.33	6	2.20	10	2.00	2
c	2.00	6	2.20	10	2.00	2
d	2.00	6	2.20	10	1.00	2
3a	2.57	7	2.36	11	2.00	2
b	2.28	7	2.80	10	2.00	2
c	2.57	7	2.70	10	2.00	2
d	1.71	7	1.90	10	1.50	2
4	2.00	7	1.72	11	1.50	2

	Greenfield (N=4)		St. Stephen (N=4)		Fulton (N=5)	
	M	N	M	N	M	N
Question 1a	3.00	1	2.00	4	2.00	5
b	2.33	3	2.50	4	2.40	5
c	1.50	2	2.25	4	2.80	5
d	2.00	3	2.00	4	1.80	5
2a	2.00	3	2.25	4	2.00	4
b	3.00	2	2.25	4	2.25	4
c	2.66	3	2.00	4	2.50	4
d	1.50	2	2.25	4	2.25	4
3a	2.00	3	2.50	4	2.50	4
b	3.00	2	2.25	4	2.50	4
c	2.00	2	2.50	4	2.75	4
d	2.66	3	2.50	4	2.00	4

	Greenfield (N=4)		St. Stephen (N=4)		Fulton (N=5)	
	M	N	M	N	M	N
Question 1a	3.00	1	2.00	4	2.00	5
b	2.33	3	2.50	4	2.40	5
c	1.50	2	2.25	4	2.80	5
d	2.00	3	2.00	4	1.80	5
2a	2.00	3	2.25	4	2.00	4
b	3.00	2	2.25	4	2.25	4
c	2.66	3	2.00	4	2.50	4
d	1.50	2	2.25	4	2.25	4
3a	2.00	3	2.50	4	2.50	4
b	3.00	2	2.25	4	2.50	4
c	2.00	2	2.50	4	2.75	4
d	2.66	3	2.50	4	2.00	4
4	3.00	3	2.00	3	1.80	5

	St. Rosalia (N=4)		Lemington (N=2)		Lawrenceville Catholic (N=5)	
	M	N	M	N	M	N
Question 1a	2.50	4	2.50	2	1.80	5
b	2.50	4	2.00	2	2.00	5
c	3.00	4	3.00	2	2.00	5
d	2.25	4	2.50	2	2.00	5
2a	2.33	3	3.00	1	2.50	4
b	2.33	3	3.00	1	2.50	4
c	3.00	3	3.00	1	2.75	4
d	2.33	3	1.00	1	2.40	5
3a	3.00	4	2.50	2	1.60	5
b	2.50	4	3.00	2	1.60	5
c	2.25	4	2.00	2	2.00	5
d	1.75	4	2.50	2	1.40	5
4	2.00	4	2.00	1	1.80	5

	St. Joseph (N=3)		East Hills (N=16)		Dilworth (N=1)	
	M	N	M	N	M	N
Question 1a	2.00	3	2.12	16	2.00	1
b	2.00	3	2.50	16	3.00	1
c	2.66	3	2.31	16	3.00	1
d	2.00	3	2.43	16	2.00	1
2a	----	-	2.64	14	3.00	1
b	----	-	2.78	14	3.00	1
c	----	-	2.57	14	3.00	1
d	----	-	2.64	14	3.00	1
3a	2.00	3	2.84	13	3.00	1
b	2.00	3	2.61	13	3.00	1
c	2.00	3	2.76	13	3.00	1
d	2.00	3	2.76	13	3.00	1
4	2.00	3	2.13	13	2.00	1

	St. Mary's (N=15)		Rogers (N=19)	
	M	N	M	N
Question 1a	1.86	15	2.00	19
b	2.00	15	2.38	18
c	2.26	15	2.44	18
d	1.86	15	2.33	18
2a	2.07	14	2.44	18
b	1.78	14	2.61	18
c	2.30	13	2.50	18
d	1.78	14	2.38	18
3a	2.07	13	2.46	15
b	1.92	13	2.46	15
c.	1.84	13	2.60	15
d	1.69	13	2.50	14
4	1.78	14	2.25	16

Table 23

Phase III

Attitude
Subscore by Home School
Arsenal

	Holy Rosary (N=3)		St. Bede (N=30)		Arsenal Middle (N=47)	
	M	N	M	N	M	N
Question 1a	2.66	3	2.15	26	2.35	42
b	3.00	3	2.03	26	2.58	43
c	3.00	3	2.30	26	2.47	42
d	3.00	3	1.76	26	2.40	42
2a	3.00	3	1.73	23	2.76	30
b	3.00	3	2.09	22	2.63	30
c	3.00	3	2.18	22	2.60	30
d	2.00	3	1.63	22	2.63	30
3a	3.00	2	2.60	25	2.26	19
b	3.00	2	1.96	25	2.26	19
c	3.00	2	2.00	25	2.47	19
d	3.00	2	2.00	25	2.22	18
4	2.66	3	1.70	27	2.48	41

Table 24

Phase III

Attitude
Subscore by Home School
South Side

	St. Agnes (N=2)		Mt. Oliver (N=9)		Brookline (N=8)	
	M	N	M	N	M	N
Question 1a	3.00	2	1.83	6	2.25	8
b	3.00	2	2.00	6	2.87	8
c	3.00	2	2.33	6	2.75	8
d	3.00	2	2.16	6	2.00	8
2a	2.50	2	2.42	7	2.66	6
b	3.00	2	2.12	8	2.33	6
c	2.50	2	2.57	7	2.66	6
d	3.00	2	2.14	7	2.16	6
3a	2.50	2	2.62	8	1.80	5
b	2.50	2	2.71	7	1.40	5
c	2.50	2	1.57	7	2.20	5
d	2.50	2	2.00	7	2.20	5
4	3.00	1	2.00	7	2.00	7

	Beechwood (N=22)		Overbrook (N=11)		West Liberty (N=6)	
	M	N	M	N	M	N
Question 1a	2.45	20	2.40	10	2.16	6
b	2.65	20	2.66	9	2.50	6
c	2.60	20	2.40	10	2.33	6
d	2.20	20	2.10	10	2.00	6
2a	2.52	17	2.62	8	2.50	4
b	2.64	17	2.75	8	2.50	4
c	2.70	17	2.62	8	2.50	4
d	2.29	17	2.50	8	2.75	4
3a	2.61	18	2.33	6	2.16	6
b	2.50	18	3.00	6	2.66	6

				1.83	6	2.25	8
	b	3.00	2	2.00	6	2.87	8
	c	3.00	2	2.33	6	2.75	8
	d	3.00	2	2.16	6	2.00	8
	2a	2.50	2	2.42	7	2.66	6
	b	3.00	2	2.12	8	2.33	6
	c	2.50	2	2.57	7	2.66	6
	d	3.00	2	2.14	7	2.16	6
	3a	2.50	2	2.62	8	1.80	5
	b	2.50	2	2.71	7	1.40	5
	c	2.50	2	1.57	7	2.20	5
	d	2.50	2	2.00	7	2.20	5
	4	3.00	1	2.00	7	2.00	7

92

	Beechwood (N=22)		Overbrook (N=11)		West Liberty (N=6)	
	M	N	M	N	M	N
Question 1a	2.45	20	2.40	10	2.16	6
b	2.65	20	2.66	9	2.50	6
c	2.60	20	2.40	10	2.33	6
d	2.20	20	2.10	10	2.00	6
2a	2.52	17	2.62	8	2.50	4
b	2.64	17	2.75	8	2.50	4
c	2.70	17	2.62	8	2.50	4
d	2.29	17	2.50	8	2.75	4
3a	2.61	18	2.33	6	2.16	6
b	2.50	18	3.00	6	2.66	6
c	2.77	18	2.50	6	2.66	6
d	2.11	18	2.66	6	2.00	6
4	2.33	20	2.22	9	1.66	6

22

Table 25

Phase III

Attitude
Subscore by Home School
McNaugher

	McNaugher (N=54)	
	M	N
Question 1a	2.50	53
b	2.33	53
c	2.35	53
d	2.49	53
2a	2.54	53
b	2.15	53
c	2.30	53
d	2.49	53
3a	2.47	53
b	2.09	53
c	2.39	53
d	2.30	53
4	2.40	44

Table 26

Phase III

Attitude
Subscore by Home School
Oliver

	Columbus (N=35)	
	M	N
Question 1a	2.50	30
b	2.53	30
c	2.80	30
d	2.20	30
2a	2.40	35
b	2.48	35
c	2.48	35
d	2.17	35
3a	2.71	21
b	2.71	21
c	2.66	21
d	2.47	21
4	2.32	34

B. Graduate Placement and COOP Programs

1. 1971 Summary

The scope of the Graduate Placement program is reflected in the following figures provided by the Pittsburgh Public Schools. During the period June 1968 through April 1969, of a total of 2,653 students certified by counselors as ready to work, 1,498 were placed. Of the 1,155 not placed, the majority (1,017) had elected some other post-graduate option (military service, marriage, further education), had not fulfilled requirements for graduation, or had otherwise voluntarily excluded themselves from the placement program.

The intent of the COOP program was to provide work experience as an adjunct to classroom instruction during a student's senior year. The COOP program has made available this work experience in virtually all areas of comprehensive specialization. As of February 1971, approximately 429 students from all city high schools were enrolled in this program.

A survey of students, employers of students, and project staff members suggested both programs were well conceived and administered, with an eye toward continuous updating and staffed by concerned, competent, and dedicated professionals. In terms of virtually all program objectives, the picture resulting from an analysis of the data was quite favorable.

2. 1972 Summary

The follow-up study of June 1971 high school graduates, prepared by Systems-Wide Programs and Services of the Pittsburgh Public Schools, indicated that 4,497 students graduated from the Pittsburgh Public Schools. Of that number, 56.8% entered post high school education; 25.3% became employed; 14.0% either left Pennsylvania, were unavailable for immediate employment, or were waiting for job placement; and 3.9% entered the Armed Forces.

The COOP program included work experience in all areas of comprehensive specialization. As of June 1971, 421 seniors were enrolled in skill-centered courses; the enrollment figures include students from both the academic and general courses of study. Upon graduation, 33.3% had entered post high school education; 46.2% were employed; 16.2% were either residing in another state, unavailable for immediate employment, or waiting for job placement; and 4.4% entered the Armed Forces.

Both these programs are integral parts of a broader system of counseling which includes testing and guidance components, the instructional process and other school and work-related experiences which influence the student.

A new feature was added to the COOP placement facilities at the OVT Center. Based on a model of a 6-year operational School of Industry Job Development Program, the Pittsburgh Urban League worked with the Pittsburgh Board of Education to design and implement a job center in each of five Pittsburgh high schools. The purpose of these job placement centers was to provide employment opportunities for seniors in the inner-city who are not continuing their formal education beyond high school.

The program offers on-site recruiting of students by employers in a mass job placement effort at the job centers. For students not exposed to the skill-centered training programs, supportive assistance was provided in the area of pre-work preparation. For example, the student could be interviewed in the familiar atmosphere of school surroundings. Many students were placed in jobs as a result of the job center. The job center concept supplements the system-wide placement program currently in existence.

3. 1973 Evaluation Results

Table 27 shows the number of graduating seniors enrolled within the Placement Program who did not continue with post high school, full-time education. The scope of the work conducted at the job centers within these 13 participating schools is reflected in these figures, which were provided

Table 27

School to Industry Program, 1973

School	Students Registered	Students Interviewed	Students Placed	Total Employers	Total Interviews
Allderdice	140	130	25	23 + 9 Service	910
Allegheny	199	161	11	21 + 4 Service	246
Carrick	250	250	19	20	458
Fifth Avenue	85	60	0	20 + 5 Service	408
Gladstone	50	73	8	22 + 8 Service	365
Langley	115	82	12	21 + 4 Service	246
Oliver	131	123	0	27 + [illegible] Service	615
Peabody	131	163	0	33 + 4 Service	652
Perry	127	117	0	24 + 9 Service	585
Schenley	168	144	9	32	820
South	146	129	5	14	255
South Hills	382	254	11	22	726
Westinghouse	192	192	0	13 + 5 Service	252
Totals	2,116	1,878	100	292 + 56 Service	6,538

June 20, 1973

by the Placement staff. In 1972, the Industry Job Development Program implemented these Job Centers in five Pittsburgh high schools. The number of schools increased to 13, serving 6,538 students. This year's evaluation for this segment focused on gathering attitude data from a sample of students and employers of students in the programs.

a. Students' Attitudes. Responses were received from 11 out of 75 questionnaires mailed to Cooperative Work Experience Program students. This represents only a 14% sampling; the results discussed below reflect the responses of this sample. Students were asked to identify their first contact with the COOP Coordinator. The responses indicated that these contacts originate from three primary sources--the school counselor, the Distributive Education Coordinator, and other students enrolled in the program. Students stated that contact with the Coordinator was made either in the latter part of the 11th grade or the beginning of the 12th grade. Students indicated that during this initial contact, they discussed the benefits of the COOP and how it aided in finding employment, emphasized the importance of skill-training, oriented students on interview techniques, and stressed the necessity and usefulness of certain types of courses.

Students identified various ways in which the Coordinator assisted them in selecting a satisfactory COOP program. The focus of this assistance seemed to depend on matching student qualifications with the potential job and advising students about curriculum selection.

There appeared to be no definite relationship between the number of times a student asked and then met with the Coordinator. Two Coordinators asked to meet with students more times than the students asked to meet with them; three students requested more meetings than the Coordinator. The majority of the time each individual requested a meeting, one was scheduled. Arrangements could always be made for meetings.

Student advice on employers' expectations came from various sources. Students received advise from teachers and the Coordinator, from other students in the program, and sometimes from outside individuals such as guest speakers at the school.

In stating reasons why they chose a particular skill area, students cited interest, necessity for experience in a chosen skill, and current and potential pay scales. Seven students stated that their COOP experience matched their skill training. In most cases, their class work prepared them for their occupational duties. In addition, students experienced involvement with new people, training by a company, and gained knowledge of the business world. Two students stated their work did not match their training.

Students expressed interest in various career plans following graduation. Some chose to receive a higher education in a specific field, to obtain a specified job, to attain a certain level of employment, and to receive an apprenticeship in the student's present job. Factors that affect students' career decisions consisted of work experience, the opportunities they received to learn about specific careers, acceptance into schools, salary, and hours.

Suggested student changes in the work experience program focused on extension of the program, additional occupational training, raising standards of school courses, and making the program available to 10th, 11th, and 12th grade students.

Overall, students seemed to be satisfied with their work experience program. The number of questionnaires returned, however, represents a low sample, and therefore it is difficult to use the information to recommend changes.

The following list of employers was given to AIR by the Project Coordinator. The asterisk (*) identifies the employers from whom AIR received responses.

EMPLOYERS

F. W. Woolworth
Northside Informer
*Morrcraft Co.
*WTAE Channel 4
*Glo-Ran Pet Shop
A & P
Sears
Hornes
Blue Cross
G. C. Murphy's
Kaufmann's
*U. S. Safety Trolley
Gateway Fruit Co.
*Roth Cash Register Co.
*Schaefer Machine
Lerner Shops
Union National Bank
Neyhart Print Co.
Gulf Oil Co.
*First Fed. Savings & Loan Assoc.
*Household Finance Corp.
*Wheel-A-Brator-Frye Inc.
*Deeter, Ritchey, Sippel Assoc.
Highland Arco Service
Harry Survis Auto-Seat Cover Co.
*Morris Paper Co.
*Mansmann's
*Kroger's
*McIntyre Cake
Gimbels
Penn Brook
*Rockwell International
*Postal Instant Press
Keystone Mailing Service
*Schiff Printing
Board of Education
Machunga Enterprises
U. S. Army Corps of Engineers
Alcoa
Willie McClungs
William's Instant Copy

EMPLOYERS

W. T. Grants
*Jacobson Picture Frame
Stubbs Auto Body
Cox's
Kingsley House
Riley's Boron
Foodland
Ray Printing Co.
*Standard Office Supplies
Gulf Gas Dormont
Becker's
*Protective Clothing Co.
Olympic Sport Center
Designers Forge
Maintenance Engin.
*Allied Electric Co.
Lawrencevelle Screw Co.
Miller School
Chiocca Auto Body
*Westinghouse Credit Corp.
Ernie's Auto Body
Russellton Auto
McCleary School Daycare
Mondaes Auto Supply
*Prion Machine Tool Co.
Frey Cabinet
American Thermo Plastic
Gestetner Corporation
Honeywell Corp. Union Carbide Bldg.
Smith Waterhouse Corp.
American Telephone Co. of Western Pa.
*Blue Cross
Hamilton Inc.
*Mellon Bank
Travelers
*Bell Telephone Co.
Sierra Permaucer Furniture Co.
Pennsylvania Sling Cobb Wire & Rope
*Honus Wagner Co.
United Parcel Service

b. Employers' Attitude. The 114 employers listed above were each mailed a questionnaire which requested their opinion of the vocational training of the students they hired from the COOP Program. The following description of the employers' attitude is presented according to the responses received to each item; the description will be more clearly understood if the reader refers to Table 28 on pages 66 and 67. Responses were received from 32 employers, representing about 28% of the total number of employers to whom AIR mailed questionnaires.

The majority of the employers (20) represented relatively small organizations employing fewer than 50 persons as shown on Table 29. The two largest categories of employment for which these companies hired OVT graduates were secretarial/clerical and labor.

Employers' responses to Questions 3, 4, and 5 indicated that OVT graduates are perceived in a relatively favorable light. A total of 26 respondents either agreed or strongly agreed that the OVT graduate performed an adequate job; 27 indicated that the OVT graduate required about the same or less orientation than other new employees; and 29 indicated that relative to other new employees, the performance of OVT graduates was at at average or above-average level.

Question 6 provided employers with an opportunity to express any problems they might have experienced with the OVT graduate. Of a total of 32 respondents, 18 either did not indicate any problem or wrote "no problem." Of the problems indicated, the greatest number (10) was assigned to an attitude and motivation category. Included in this category were such statements as, "Employees are not punctual," and "Employees lack enthusiasm." Other problem categories included poor language use, lack of general skills, and appearance.

Question 7 requested employers to rate attendance and attitudes of OVT graduates to supervision and co-workers. For all three areas, ratings were highest between acceptable and excellent. Five stood at the below-average level.

Table 28

Employer's Questionnaire

The purpose of this questionnaire is to ask your general opinion regarding the adequacy of vocational training, as reflected in the job performance of Pittsburgh Public School graduates within your employ. Your objective response to these items will help insure that Occupational and Vocational Training (OVT) programs remain responsive to your needs.

1. Employer Identification

   Name of Organization _____

   Type of Operation _____

   Number of Employees at this Site _____

   Total Number of Employees in Company _____

2. For what types of employment have you hired OVT graduates (check as many as apply)

18 Secretarial, clerical	2 Maintenance
6 Labor	___ Cosmetology
5 Skilled trade	1 Transportation
___ Medical, dental, lab assistant	___ Data Processing
2 Food Services	7 Other (explain) ___
5 Sales	_____
1 Bank services	_____

3. The OVT graduates that I employ are doing an adequate job. (Circle the appropriate number)

1 (0)	2 (0)	3 (6)	4 (19)	5 (7)
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

4. Relative to other new employees, how much orientation and training is required before the OVT graduates can perform the job satisfactorily? (Circle the appropriate number)

   1 Less orientation (2)

   2 About the same (25)

   3 More orientation (5)

5. Relative to other new employees, how would you rate the performance of OVT graduates? (Circle the appropriate number)

   1 Above average (8)

   2 Average (21)

   3 Below average (3)

6. What major problems have you had with OVT graduates?

___ _____

___ _____

___ _____

7. Based on your experience with OVT graduates, rate their attendance, attitude toward co-workers, and attitude toward supervisors by circling the appropriate rating for each of the behaviors indicated in the chart below.

Rating	Attendance		Attitude Toward Co-Workers		Attitude Toward Supervisors	
Excellent	(18)	4	(16)	4	(17)	4
Acceptable	(10)	3	(16)	3	(13)	3
Below Average	(4)	2	(0)	2	(1)	2
Unacceptable	(0)	1	(0)	1	(0)	1

8. Training received by OVT graduates has been braod enough to allow them to transfer between jobs requiring moderately different skills. (Circle the appropriate number)

1 (0)	2 (3)	3 (12)	4 (12)	5 (2)
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

9. OVT graduates are highly promotable. (Circle the appropriate number)

1 (1)	2 (0)	3 (20)	4 (9)	5 (1)
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

10. When you are in need of employees, there are a number of sources that you might utilize. For the sources listed below, indicate your first, second, and third preference by placing the number 1, 2, or 3 before the source.

	(1)	(2)	(3)
___Private employment agency	0	2	5
___State employment agency	1	2	5
___Your own employment office files	16	2	3
___Relatives, friends or acquaintances of present employees	4	9	1
___Public school sources (guidance counselors, vocational coordinators, etc.)	8	11	9
___Other (please specify) _____	2	4	5

11. Do you have, or have you ever had, a COOP (Cooperative Work-Study Program) student in your employ? (Circle the appropriate response)

1 Yes (30) 2 No (2)

If yes: a. How many of these students have you had in your employ? _____

b. Of this number, how many continued in your employ after graduation? _____

12. These COOP students were sufficiently prepared to make a positive contribution to my operation. (Circle the appropriate number)

1 (0)	2 (2)	3 (3)	4 (22)	5 (5)
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Questionnaire prepared by American Institutes for Research, Pittsburgh, Pa.

Table 29

Size of Organizations Responding

Number of Employees	0-10	11-50	50-100	101-500	Over 500
Local Site	9	11	2	6	4
Total Company	5	11	1	2	7

Table 30

Number of COOP Students Employed

Number of Students	1-5	6-10	11-20	Over 10
Employed	15	8	2	1
Retained After Graduation	24	1	1	0

Responses indicated that 14 employers agreed or strongly agreed that OVT graduates could be promoted in their companies; 12 respondents remained neutral. Responses toward promotability indicated that 10 respondents agreed or strongly agreed that OVT graduates are highly promotable; 20 remained neutral.

The employers were asked to indicate first, second, and third source preference for new employers. Most employers (16) indicated that their first choice was their own employment files, while 8 preferred public school sources. Employers' second choice for new employees, however, is the public school sources, followed by relatives, friends, or acquaintances. When first and second source preferences combined, public school sources were mentioned most frequently with 19 responses, followed by personnel employment office files (16 responses).

Of the 32 respondents, 30 had employed or currently employ COOP students. The number of COOP students presently employed by any one organization was relatively small, but most organizations indicated that they employed from one to five OVT graduates at one time or another. Question 12 asked for an evaluation of the COOP students' preparation in terms of making a positive contribution to an employer's operation. Of the 32 COOP employers, 22 agreed that these students received adequate preparation 5 more strongly agreed. The largely positive response to this item would appear to indicate that the COOP student is perceived as a valuable addition to the work force by most employers.

According to the sample of employers who responded to the questionnaire, it seemed that OVT graduates are capable of joining the business world, with no outstanding problem areas. Most of the employers hired OVT graduates as secretarial or clerical personnel. Overall, the graduates were viewed favorably and performed well on their jobs. Their attitudes were positive. Those few employers who had comments about minor problems stated that attitude ranked high, but the number was quite small. One index of how well the OVT graduates blended into the work force was provided through the willingness of the employers to transfer these graduates to other tasks--either at a parallel or a higher level.

C. Project SET (Select Employment Trainee)

1. 1971 Summary

The staff effort during this period was directed toward the planning and development of this pilot program. AIR's role at this time was to review and comment on this preparation. AIR indicated that the planned activities were accomplished and, where applicable, incorporated the products of those activities. The preparation phase reflected the large amount of time and effort required in planning and preparing for the implementation of an innovative educational process. Unfortunately, all too often in other projects of this nature, this phase is omitted; planning and implementation are attempted simultaneously, with understandably unsatisfactory results.

AIR felt that the activities of Phase I represented a commendable overall planning effort and recommended comments directed toward identifying important areas which required further detailed attention early in the implementation process. A definitive frame of reference, together with well-defined means for detecting and communicating needed change, greatly facilitated the adjustments and modifications which were anticipated as the program evolved.

2. 1972 Summary

Attitude questionnaires were administered to samples of various program participants--students, parents, employers, and staff.

a. Students' Attitude. Students' attitude toward the work experience program seemed to be positive. Students enjoyed having the opportunity to work and earn money; in some cases, it was a motivator toward remaining in school. One disturbing factor which emerged from these results, however, was the student feeling regarding negative employer and employee attitudes. This might have resulted from a student's prior experience and AIR suggested that this be examined during individual counseling sessions.

b. Parents' Attitude. The small parental return rate (15.5%) made it difficult to assess the attitude of the parents toward the program. However, if these responses were an accurate reflection of parental attitude, the program was positively received by parents. Not only did they enjoy having their children employed, but they also felt relieved because the young people were able to buy some things parents could not afford to obtain for them. Another positive side effect was the willingness of students to continue attending school and their realization of the importance of at least a high school diploma in the acquisition of employment.

c. Employers' Attitude. The Project SET coordinator supplied AIR with a list of 28 employers with whom 33 students in the cooperative work experience program were currently or previously affiliated. A total of 25 employers were interviewed by phone; 21 students were still working; and the remaining 12 were no longer employed either because they quit or had been asked not to return to work.

None of the employers who were interviewed offered negative comments about the program operations or the program staff; there were, however, a few suggestions for modification, based on their individual experiences with the program. For example, one employer commented that his student employee was not cognizant of the entire program of which she was a part. She did not understand what any other students were doing. This employer suggested a regularly scheduled meeting where the student participants could share the experiences of their jobs. In addition, school and program staff members could attend in order to receive some feedback about actual operations in the field.

One of the most common remarks made by the employers was a lack of student awareness concerning job courtesies--not phoning in to report off, high absentee rate, tardiness when reporting to work, irregular attendance, and quitting with no notice. There seemed to be certain aspects of job responsibility for which these students were completely unprepared. Some employers suggested an orientation program designed specifically to discuss the "nuts and bolts" of job courtesies.

The discussions with the employers yielded some additional anecdotal information. Most of the employers who experienced positive results with their student employees indicated a willingness to participate again in the program by taking another student during the next term. No one expressed outstanding critical comments about the program--generally, they felt it was a worthwhile idea which had social significance. A few expressed dismay at the extensive time involved in working with and training these students, and they did not feel a sufficient return on the investment of their time and effort. Overall, most employers were willing to contribute the necessary efforts to expose the students to the business world.

d. Staff Attitude. All three members of the Project SET staff responded to the attitude questionnaire. The purpose of the questionnaire was to gather information about the staff's opinions on training, need for additional support within the school system, and the role of the students in the program.

Overall, Project SET personnel seemed to feel positively about the program. Many of the comments and suggestions coincided with the student responses. For example, both groups identified the negative attitudes exhibited by some employers and their employees toward the students. Staff comments suggested that they work together to make the program successful and agreed upon specific areas where the program could be improved.

3. 1973 Evaluation Results

The following program descriptions and objectives reflect an updated version of Project SET. As of July 1973, Project SET became part of an expanded program entitled, "Cooperative Work Study Program for Disadvantaged Urban Youth." Program objectives remain the same as do other program characteristics. The staff includes one coordinator-counselor, six teacher-coordinators, three paraprofessionals, and one clerk who serve an additional 180 students in 13 high schools.

Purpose of the Program:

Project SET utilizes special methods of counseling, curriculum, and media to closely support specific students. These students have been identified as grossly alienated from the educational process, and most aspects of personal adjustment and community life. On-the-job training is used as a positive inducement into the student's lifestyle, hopefully to alter his or her perception of school and the world of work. Vital to the program is a component that assures students one credit for every 180 hours of successful, supervised work experience. Additional credits may be awarded on the same basis, but will not exceed two credits per year in grades 9-12. Intensive counseling and supportive aid are provided to assist the student in both the academic classes and on-the-job training sites.

Student and Program Support:

SET students have always presented severe problems to all employees of the school they attend, ranging from principals to custodians. According to the staff, many school personnel find it extremely distasteful to even discuss some of SET students. Within the last year many special accommodations were provided that assisted the SET staff in supporting their students. Specific school personnel made these alternatives possible. Some alternatives were more difficult than others, but in each case the accommodation was the remedy to a specific need that no allowances could be provided for through routine channels.

Other agencies outside the school system made public their opinions of this needed and successful program. The Mayor's Office provided the students with $3,000 worth of transportation tickets. Bell Telephone and the United States Postal Service have assisted by providing work sites to students that they normally would not. The reason was the extensive counseling and supportive aid provided for each student by the SET staff.

General Objectives:

- To assist the student to gain a skill and recognize a value for education and work while employed part-time in business and industry.

- To demonstrate that the private sector, local school systems, and government agencies can effectively coordinate their individual efforts in providing alienated youth with meaningful counseling, career exploration and training experiences, and to develop innovative program models for these experiences.
- To help disadvantaged alienated students achieve positive work experiences while they continue formal education and training to prepare for the world of work.
- A general objective of the program is to support the student in every way possible (school, job, and home) to remain in school and graduate.

Counseling:

- To identify student attitudes toward education and work.
- To identify the students' interests and capabilities, then use them as a basis of counseling in determining training and career exploration potential.
- To provide supportive counseling in an attempt to develop positive attitudes toward employment and education.

Pre-Job Training:

- To develop an open, non-structured participation program which utilizes filmstrips, movies, tapes, and role-play activities to provide experiences in potential employer-employee situations.
- To explore careers identified as relevant to student interests.
- To initiate an intensive approach toward students self-modification of attitudes and behavioral patterns considered detrimental to employer-employee relations.

On-the-job Training:

On-the-job training positions were developed by the Project SET staff. The following list contains the names of participating companies and the type of training the SET students received as of April 1973.

	COMPANY	NUMBER OF STUDENTS	TYPE OF TRAINING
1.	Allegheny Community College	1	Audio-Visual Assistant
2.	A & P WEO	1	Stock
3.	Arco Gas	2	Attendant
4.	Baker's Dairy	1	Counter clerk
5.	Banksville Sunoco	1	Attendant
6.	Beacon Pharmacy	1	Delivery & stock
7.	Bell Telephone	6	1 - Directory 2 - Grafting - Engineering 1 - Marketing 2 - Framing men
8.	Berman's Market	2	Sales & stock
9.	Big Daddy Spats	3	Counter work
10.	Bi-Rite Oil Company	1	Attendant
11.	Boykin's Restaurant	1	Cook's helper
12.	Catholic Cemeteries Assn.	1	Landscape & masonry
13.	Cavert Wire Co.	2	Book packaging
14.	Centre Builders	1	Sales & stock
15.	Cox Steel Rule & Die Co.	6	Metal fabrication
16.	Crossroads Restaurant	1	Bus boy
17.	Dean Electronics	1	Sales & apprentice
18.	Diamond Carbon Company	1	Production work
19.	Diamond's 5 & 10	4	Sales & stock
20.	Dickson Brothers Cleaners	1	Cleaning
21.	Dormont Gulf Station	1	Attendant
22.	Dottie's Market	2	Sales & stock
23.	Drapery World	1	Sales & drapery installation
24.	Drapes & Things	1	Sales & drapery installation

COMPANY	NUMBER OF STUDENTS	TYPE OF TRAINING
25. East Liberty American Gas	1	Attendant
26. Falcon Service Station	1	Attendant
27. Fischer Carpet Company	1	Carpentry helper
28. Foodland Grocery	3	Stock
29. Franklin Complex	1	Janitor
30. Fred's Boron Station	1	Attendant
31. Friend's Exxon	2	Attendant
32. General Analytics	1	Surveyor's Assistant
33. George Aiken Restaurant	1	Counter girl
34. Gil's Department Store	1	Stock
35. Gimbels Department Store	2	Sales & stock
36. Heads Together	1	Maintenance
37. Home for Crippled Children	3	Child care
*Special Service	1	
(Psychological testing and rehabilitation; job exploration while in residence at the home as a patient.)		
38. John Heineman Company	1	Loading dock
39. Johnson Florist	1	Delivery
40. Kelson's Restaurant	1	Bus boy
41. Ken's American Gas	1	Attendant
42. Key's Arco Gas	2	Attendants
43. KQV Radio	1	Office Skills
44. Krogers	3	Check out trainee & stock
45. Lifster & Sons	1	Clerical
46. Love's Boron Station	1	Attendant
47. Mark Lumber Company	1	Stock

COMPANY	NUMBER OF STUDENTS	TYPE OF TRAINING
48. Mason's Auto Repair	1	Mechanic's helper
49. Jas. H. Matthews & Company	1	Printing assistants
50. McBeth Landscaping	1	Landscaping
51. McCrory's Department Store	5	Sales
52. McDonald's Restaurant	1	Counter work
53. McMillan & Baer	1	Car Jockey
54. Melwood Leader Drugs	1	Stock
55. Metropolitan Day Care Center	1	Child care & development
56. Meyer's Exxon	1	Attendant
57. National Record Mart	6	Sales & stock
58. Northern Communities Mental Health & Mental Retardation Services	2	Typing & filing
59. Northern Light Company	1	Clerical & stock
60. Opus One	1	Sales
61. Penn Overalls & Supply Co.	1	Uniform Fabrication
62. Pg. Commercial Heat Treating Company	1	Apprentice
63. Pgh. Glove Company	3	Glove Manufacturing
64. Pittsburgh Office Products	1	Clerk Typist
65. Phillip's Exxon Station	1	Auto wash
66. Pizza Parlor	1	Counter work
67. Post Office	3	Postal worker trainees
68. Sandy's Restaurant	4	Kitchen Helper & Counter work
69. Gene Sane's Upholstering Co.	2	Upholstering apprentice
70. Sears, East Liberty	2	Sales & stocking
71. Shealey's Sunoco	1	Attendant
72. Specialty Clothing	1	Stock

COMPANY	NUMBER OF STUDENTS	TYPE OF TRAINING
73. Simon's Pharmacy	1	Sales & stock
74. Stillwagon's Sunoco	1	Attendant
75. Stuckert's Exxon	1	Attendant
76. Sweet Williams Restaurant	4	Counter work & kitchen helper
77. Tambellini's Restaurant	1	Bus boy
78. Thorofare Market	1	Stock
79. Toe Con Furniture	1	Tube tester
80. Thrift Drugs	1	Stock
81. Trenton Dairy	1	Delicatessen sales
82. Typecraft Press Inc.	1	Printer's helper
83. Turner's Exxon	1	Attendant
84. United Parcel Service	1	Loading dock
85. Urban Improvement & Development Corp.	1	Construction
86. Urban Youth Action	1	Clerical
87. Veterans Administration Hospital	2	1 - Clerk typist, Med. Ad. Division 1- Painter's helper, Eng.
88. Vilish Gulf Station	1	Attendant
89. WAM-TV	1	Customer service & Clerical
90. Wheeler Paints	1	Sales & stock
91. White Tower	7	Short order cooks
92. Winkys Restaurant	3	Food preparation
93. World Surplus	1	Stock
94. WRS Motion Picture Lab	1	Film processing
TOTAL	155	

a. Students' Attitude. A sample of 44 students enrolled in Project SET was selected by the Project Coordinator to complete questionnaires during one of their regular meetings. To insure anonymity, the completed questionnaires were returned in a sealed envelope to the project director who then mailed them directly to AIR. All 44 students completed questionnaires. Overall, the students again responded positively to the work experience program.

Students indicated aspects of the program which they liked best. For example, seven students stated they liked not only the credit they received for working but an opportunity to earn money. Four students enjoyed meeting people and the work they did. Others commented about a variety of positive program features--the program allows for failures and provides occasions to improve skills. It also supplies a chance to learn about business operations, gain work experience, and assume a sense of responsibility. Students seemed to enjoy the exposure to the business world, not only in terms of relating to other people, but learning about new jobs. A few appreciated the potential follow-on for employment after graduation.

Nineteen students responded that there was nothing which they liked least about the program. Some students cited causes for minor dissatisfaction, such as minimum hours and low salary, specific days set aside for work, no increase in salary, working and attending school, and no early dismissal from school.

Regarding attitude change toward work, ten students said their attitude had remained unchanged. The remainder of the students stated they began to realize greater personal satisfaction, they learned the value and necessity of a steady employment, they developed a desire to learn, and gained a sense of responsibility. These responses suggested that students are more motivated toward self-improvement.

Students who indicated an attitude change toward school stated that they now began to realize the importance of an education and the need to study harder, to be more mature, and to maintain good grades. Students acknowledged the assistance that the school supplied in securing a job. Seventeen students cited no change in attitude had occurred.

Twenty-five students indicated they would make no program changes. Those students suggesting changes cited the need for additional work hours, more jobs, additional credits, salary increases, mandatory school attendance, and greater exposure among the students. Students seemed to want others to have the opportunity to also participate in this program.

b. Employers' Attitude. The Project SET Coordinator supplied AIR with a list of 55 employers with whom SET students in the cooperative work experience program are currently or were previously affiliated. Questionnaires were sent to the 55 employers who returned them directly to AIR. Of the 55 questionnaires mailed, 14 (about 25%) were received by AIR.

Employers indicated aspects with which they were satisfied of the SET students current work performance. These aspects included positive attitudes toward work, willingness to learn, and high quality of work performance. Employers stated their SET students showed responsibility, dependability, and capability. Thirteen employers felt that SET students demonstrated improvement in their work performance during their period of employment. Some ways in which students improved were that students gained more confidence in their ability to do their work, they were more alert, and able to assume additional responsibility without assistance. Students improved in the performance of their jobs and worked quickly and efficiently. Some employers felt that improvement was due to ongoing supervision and the fact that the students worked directly with experienced people. Others stated that students improved as they obtained a working knowledge of the business.

There were seven positive responses and six negative responses as to whether the student was adequately prepared to assume job responsibilities when he or she initially joined a company. Positive responses related to preparation included dependability, pleasing personalities, good work attendance, and capability. One employer indicated that the student readiness was due to the orientation received in school. Negative responses related to preparation for employment included lack of employment training, lack of experience working with the public, and lack of loyalty to the job. Two employers stated that the capability of their two student employees was lower than they had expected.

Employers were asked if the contact between them and the school had been sufficient to solve any difficulties which arose during the student's employment. Only one negative comment was received; this employer stated that the student's needs were primarily emotional and went beyond those which the school was capable of satisfactorily meeting. Most employers indicated that when the initial contacts were made between the school and the business, the limitations or problems encountered by the student were identified by the school for the employer in order to avoid any misconception on the part of the employer. Employers were appreciative of this candid approach.

Each employer was asked whether he or she would be willing to hire their student employees as full-time employees following graduation. All but four answered affirmatively, negative responses did not necessarily indicate dissatisfaction with students' work performance but reflected other factors which entered into the decision of whether or not to hire permanently. For example, one employer is prevented from hiring a student because of union requirements that full-time employment must be based on seniority and length of service with the company. Another employer stated that the only positions available required more extensive training than the student was able to gain during his period of employment. Some employers stated that if their students would remain on the payroll, it may be on a part-time basis. Overall, most employers who were satisfied with the job performance of their student employees were willing, if possible, to hire the student as a full-time employee.

None of the employers who responded to the questionnaire suggested any changes in the program. They seemed pleased with the ongoing procedures. Additional comments by the employers were generally favorable. One employer acknowledged the mutual benefit between employer and student derived from such a program.

Again, the general employer response to participation in Project SET was favorable. As with the 1972 evaluation, the employers offered some anecdotal information which indicated a positive feeling about the program. The goal of Project SET to demonstrate that the private sector and the

school system can effectively coordinate efforts to provide alienated youth with meaningful counseling and career exploration and training experiences seems to have been met.

c. SET Placements

Table 31 on the following page shows the number of students placed in occupational situations as of November 1973. Placement refers to those students employed in their first job; re-placement refers to those students who, for whatever reasons, received placement in a job other than their original one.

Table 31

Placement Program

	Placement		Re-Placement		Total	
	M	F	M	F	M	F
Allderdice	10	1	0	0	10	1
Allegheny	1	2	5	1	6	3
Carrick	7	2	0	0	7	2
Fifth Avenue	14	5	0	0	14	5
Gladstone	3	0	0	0	3	0
Langley	14	2	0	0	14	2
Oliver	13	3	1	0	14	3
Peabody	48	10	6	0	47	10
Perry	2	1	0	1	2	2
Schenley	15	4	0	0	15	4
South	16	4	0	0	16	4
South Hills	8	2	2	0	10	2
Westinghouse	7	4	0	0	7	4
Totals	158	40	14	2	165	42

d. Case Studies. Project SET is a unique program which was designed to handle unique problems. Examples of the range, abilities, problems, and situations with which the SET staff members worked are described below. These examples provide some familiarization with the scope of work and type of approach used within the SET program.

I: Case Study

AGE: 16
GRADE: 10
GRADE POINT AVERAGE: 1.8
ABSENCE: 47 days (1971-1972)
COOPERATING SCHOOL PERSONNEL:

Area I Office
Vice Principals (2 schools)
Counselors (2 schools)
Typing Instructor
English Instructor
Physical Education Instructor
History Instructor

SPECIAL PROBLEM: Student was enrolled at Allegheny, but schedule was not flexible enough to allow student to leave school in time to work. Also, classes were not offered which would assist student on the job.

SPECIAL ACCOMMODATION: A SET staff member arranged for student to attend Perry where student was able to receive the desired and necessary classes. Student was also able to leave school in time to attend work. This was, of course, done with parental permission. They were relieved because before the transfer, student tried moving closer to the job by living with a brother and then a sister causing a large degree of family turmoil. As of today, the transfer and job are very successful.

II: Case Study

AGE: 16
GRADE: 10
GRADE POINT AVERAGE: .08
ABSENCE: 42 days (1971-1972)
COOPERATING SCHOOL PERSONNEL:

Vice Principal
Counselor
Printing Instructor
Study Instructor

SPECIAL PROBLEM: Student was one of the most difficult students to place. Once we found a job for him, he was ecstatic, but the employer complained because he was five to ten minutes late each day. An investigation disclosed that his last class involved a "clean up" period and the instructor kept him until the work was done.

SPECIAL ACCOMMODATION: A SET staff member arranged with the Cooperating School Personnel above to exchange the last class with a second period study. The printing instructor was especially accommodating due to an overload in the class. The vice principal provided a special pass allowing him to leave school 15 minutes early. As of the present date, student displays a successful record on a job that six other students were released from in 2 months.

III: Case Study

AGE: 18
GRADE: 12
GRADE POINT AVERAGE: 1.2
ABSENCE: 63 days (1971-1972)
COOPERATING SCHOOL PERSONNEL:

School Nurse
Counselor
Physical Education Instructor

SPECIAL PROBLEM: Student has had extreme emotional problems due to a skin disease and harassment during her physical education class. As a result, she was placed in an Adaptive Physical Education class, which ended at 1:45 P.M. She was considered for a job, but the employer insisted that the student be on the job at 12:00 P.M. The SET staff took a "gamble" that there was the possibility if the employer was pleased with student's performance, he would give her the opportunity to work.

SPECIAL ACCOMMODATION: The SET staff members solicited the assistance of the Physical Education Instructor mentioned above. It was agreed that student would be excused for two weeks, which would allow her to become oriented to the job. During this time, our staff member requested the employer to change student's work hours or she would not graduate. He complind, and she is now attending her last period class regularly and her job at 2:30 P.M. The "gamble" worked out well, but if the Cooperating School Personnel member would not have allowed student's release time, she would have never received the chance to prove herself.

Iv: Case Study

AGE: 18
GRADE: 10
GRADE POINT AVERAGE: 1.2
ABSENCE: 58 days (1971-1972)
COOPERATING SCHOOL PERSONNEL:

Counselor
Home Room Instructor

SPECIAL PROBLEM: Student presents a severe emotional problem. His mother is an out-patient at St. Francis Psychiatric Hospital and becomes severely emotionally upset frequently. During the last incident when she became violent, she attempted to suffocate a younger child and set fire to the home after destroying many objects in it. Student also displays effeminate characteristics. He is constantly harassed in school and "hates" school.

SPECIAL ACCOMMODATIONS: There were two accommodations made for this student; they were:

(A) Student displayed emphatically to me that he could only remain in school one more year. In order to graduate in that time, he had to enroll in summer school for advanced English. His grades were atrocious and he was not accepted for the advanced class. This was very upsetting to the student, so we discovered one counselor who would sign his summer school card. This counselor took part of the responsibility for referring this student to summer school; usually the students in this advanced English class are A and B students. To our amazement, student made an A. There were three reasons: (1) the students were from other schools and did not know him; (2) he was tutored by a staff member; and (3) his determination to finish school in one year.

(B) As mentioned before, the last disturbance of student's mother was extremely dangerous. Student had to be home to "protect" the younger children. He missed seven weeks of school. His home room instructor and a SET staff member arranged with all of the student's teachers to pick up daily assignments and administer tests at home. The home room instructor did this for the entire time that student was absent. He is now back in school and passing each class.

v: Case Study

AGE: 19
GRADE: 10
GRADE POINT AVERAGE: 0.0
ABSENCE: 95 days (1971-1972)
COOPERATING SCHOOL PERSONNEL:

Area 1 Office
Principal
Counselor

SPECIAL PROBLEM: Student was given the opportunity to work at Lavelle Realty. After working for two weeks, he was suspended from school for the second time in two months. This time, readmitting him seemed out of the question. Student attended Allegheny in the morning for OVT Cabinetry Shop, and his base school was Perry where he attended school in the afternoon. He could not return to school.

SPECIAL ACCOMMODATION: Area 1 office allowed us to set up tutoring sessions at our SET office. We would assign homework and test him in English, Mathematics, and U. S. History. We were given permission to grade him, these grades given the same weight as regular school grades. Our obligation was to turn in a curriculum to Area 1 Office and carry out all regular teaching duties. Also, the principal at Allegheny allowed student to remain in school since no infraction occurred at that school. This was all successfully carried out for three months, but the final results were not as anticipated. Student quit the job and school to enter the service. It is important to recognize that every effort was made by the Cooperating School Personnel members, although there was no lasting success.

The case studies cited below focus more specifically on the nature of alienation Project SET students possessed. Reports of the type illustrated below existed for all students enrolled in Project SET.

AGE: 18
GRADE: 9

Psychological rehabilitation and evaluation was being conducted under the Bureau of Vocational Rehabilitation.

ALIENATION INFORMATION:

.....2-1/2 years attendance at high school with 2 credits completed.
.....Large family without father.
.....On Public Assistance.
.....Educable Mentally Retarded.
.....Sister is homosexual and attempted to have her join her "group.
....."Group" physically attacked her, she reacted extremely fearfully and became very disturbed.
.....Center of much ridicule at school and in the community.
.....One of three most alienated students at the school she attended.

PRESENT STATUS:

.....After six months of psychological rehabilitation and our counseling and supportive aid, she now has a desire to wash and take care of herself physically. She has also been given diagnostic evaluation and is to report to Johnstown Rehabilitation Center. Johnstown is a residential center for rehabilitation training. We are now counseling toward adjustment to the center. This effort is the culmination of an entire year of joint effort between the SET/VEPS staff and Liaison team.

AGE: 17
GRADE: 11
TYPE OF TRAINING: Clerical

ALIENATION INFORMATION:

.....On Public Assistance.

.....Had an illegitimate child who has since passed away. This has created extreme emotional upset and confusion.

.....As a possible escape or substitution, she has accepted many babysitting jobs. This was considered reasonable by the staff until it became an extreme. She began missing school and work. She had a child accompany her to the work site, since then she was terminated.

.....After much discussion and literal begging by the staff, she was accepted back to her job. Attendance at school and work became so poor that all was lost.

PRESENT STATUS:

.....She was fired and is presently employed part-time but refuses to return to school. Our only alternative has been to convince her to acquire a General Equivalency Diploma on which she is now working.

AGE: 19
GRADE: Graduated from school
TYPE OF TRAINING: Plumber's assistant and counter sales work.

ALIENATION INFORMATION:

.....Extrememly introverted personality.
.....Grade Point Average 1.3 (11th grade).
.....Absence 41 days (11th grade).
.....Projects hostile attitude.
.....His answer to most questions is, "I don't care."
.....Slow in acquiring information.

PRESENT STATUS:

.....As stated, 9th, 10th, and 11th grade revealed poor attendance and a "D" average. After he was placed on this job and warned about attendance and grades, he achieved a 2.8 - 12th grade average carrying a solid academic level and only 11 days absent. He has now graduated and is still employed after a year and a half with a $1.00 an hour raise. He remains as one of our most successful experiences.

APPENDIX A

Student Questionnaire - Phase I

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Student Questionnaire

Career Orientation - Phase I

DIRECTIONS: Circle the number which tells how you feel about the following statements.

	Agree	Undecided	Disagree
1. I enjoyed the activities in OVT.	3	2	1
2. I learned how to get along with other people.	3	2	1
3. I learned some things about myself.	3	2	1
4. I learned about what people do in some jobs.	3	2	1
5. I enjoyed helping other people do their work.	3	2	1
6. I enjoyed making things in OVT.	3	2	1
7. I enjoyed working with other people.	3	2	1

Name _____ School _____

Sex (1)____ Male (2) ____ Female

APPENDIX B

Parents' Questionnaire - Phase I and Phase II

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Pennsylvania 15219

OVT Career Orientation Program

Parents' Questionnaire

1. How do you feel about your son's or daughter's participation in the OVT Exploratory Program? _____

_____

2. Does your son or daughter talk about OVT at home? ___ Yes ___ No
If yes, what does he or she say about the program? _____

_____

3. Does your son or daughter talk about the relationship between OVT activities and occupational opportunities? ___ Yes ___ No If yes, what does he or she say about them? _____

_____

4. In what way do you think the OVT Exploratory Program has been most helpful to your son or daughter? _____

_____

5. In what way do you think the OVT Exploratory Program has been least helpful to your son or daughter? _____

_____

6. What changes would you suggest to improve the OVT Exploratory Program?

_____

_____

7. In which OVT Exploratory Program does your son or daughter participate?

		Number of children
Phase I (6th grade)	_____	_____
Phase II (7th grade)	_____	_____

APPENDIX C

Student Questionnaire - Phase II

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Student Questionnaire

Career Orientation - Phase II

Name _____ Home School _____

Sex (1) _____ Male (2) _____ Female

OVT School (1) _____ South Side (3) _____ Arsenal (5) _____ McNaugher
(2) _____ Washington (4) _____ Oliver

1. Circle the number which represents your opinion of what you learned about the world of work in Business Education:

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about what kinds of tasks people perform in various jobs.	3	2	1
d. I know what additional schooling is needed for various jobs in Business Education.	3	2	1
e. I learned enough to make a decision about whether I am interested in learning more about Business Education next year in OVT.	3	2	1

2. Circle the number which represents your opinion of what you learned about the world of work in Home Economics:

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about what kinds of tasks people perform in various jobs.	3	2	1
d. I know what additional schooling is needed for various jobs in Home Economics.	3	2	1
e. I learned enough to make a decision about whether I am interested in learning more about Home Economics next year in OVT.	3	2	1

3. Circle the number which represents your opinion of what you learned about the world of work in Industrial Arts.

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about what kinds of tasks people perform in various jobs in Industrial Arts.	3	2	1
e. I learned enough to make a decision about whether I am interested in learning more about Industrial Arts next year in OVT.	3	2	1

4. Circle the number that expresses your opinion about whether this year's OVT activities will help you choose the four subject areas you would like to participate in next year in OVT.

3 It helped a lot 2 It helped a little 1 It didn't help

APPENDIX D

Student Questionnaire - Phase III

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Student Questionnaire

Career Orientation - Phase III

Name _____ Home School _____

Sex (1) _____ Male (2) _____ Female

OVT School (1) _____ South Side (3) _____ Arsenal (5) _____ McNaugher
(2) _____ Washington (4) _____ Oliver

1. Circle the number which represents your opinion of what you learned about the world of work in Business Education:

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about what kinds of tasks people perform in various jobs.	3	2	1
d. I know what additional schooling is needed for various jobs in Business Education.	3	2	1

2. Circle the number which represents your opinion of what you learned about the world of work in Home Economics:

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about the kinds of tasks people perform in various jobs.	3	2	1
d. I know what additional schooling is needed for various jobs in Home Economics.	3	2	1

3. Circle the number which represents your opinion of what you learned about the world of work in Industrial Arts:

	Agree	It was OK	Disagree
a. I enjoyed the activities in this area.	3	2	1
b. I learned about the kinds of jobs available in this field.	3	2	1
c. I learned about the kinds of tasks people perform in various jobs.	3	2	1
d. I know what additional schooling is needed for various jobs in Industrial Arts.	3	2	1

5. Circle the number that expresses your opinion about whether OVT has helped you choose your course of study next year.

3 It helped a lot 2 It helped a little 1 It didn't help

6. How has OVT been the most helpful to you? _____

_____

7. How has OVT been the least helpful to you? _____

_____

APPENDIX E

Student Achievement Test - Phase III

Student Achievement Test

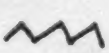
DIRECTIONS: You have been selected to help the teachers make changes in next year's OVT program. These questions were designed to find out how much you learned; your answers will be used to decide what changes need to be made. You will not receive a grade on this test.

Please circle one answer to each of the following items.

CLOTHING AND TEXTILES

1. The first thing to do before selecting a pattern is:
   a. select the fabric
   b. pick your accessories
   c. take your measurements
   d. select correct pattern size

2. Which of the following is not a stitched product?
   a. embroidered wall hanging
   b. needlepoint chair cover
   c. tie-dye scarf
   d. quilted pillow

3. Which of the following pattern markings shows the straight of the fabric (selvage)?
   a. b. c.  d.

4. A person who sews clothing is called a:
   a. pattern maker b. retailer c. cutter d. seamstress

5. What job in the clothing and textiles industry usually needs additional training beyond high school?
   a. a cutter b. a fashion designer c. a machine operator d. all of these

HEALTH AND COMMUNITY SERVICES

6. Which of the following careers requires the greatest amount of formal education?
   a. a nurses aide b. a registered nurse c. an orderly d. a practical nurse

7. Which of the following activities is not performed by a lab technician?
   a. blood typing
   b. preparing bacteria cultures
   c. distributing medicine to hospital patients
   d. preparing microscope slides

8. Which of the following occupations requires knowledge of first aid techniques?

a. a registered nurse b. a practical nurse c. an ambulance attendant d. all of the above

9. A career in the health services field is a(n):

a. social studies teacher b. lawyer c. engineer d. X-ray technician

10. Most people have a normal temperature of:

a. 35.7 b. 100 c. 98.6 d. 75.8

FOODS AND NUTRITION

11. Which of the following terms best describes the process of mixing ingredients which requires gently lifting the bottom of a mixture and raising to the top?

a. creaming b. folding c. kneading d. whipping

12. The person who plans menus, supervises food preparation, and manages food service activities is a:

a. waiter b. vegetable cook c. dietitian d. butcher

13. The form of milk from which the water has been removed is:

a. dried b. creamed c. homogenized d. skimmed

14. Good nutrition primarily depends on:

a. spending large amounts of money for food

b. using convenience foods

c. well-balanced meal planning

d. low-cost meals

15. Which of the following processes is recommended for tenderizing cuts of meat?

a. freezing b. grinding c. broiling d. frying

MANUFACTURING

16. In sheet metal work, patterns are:

a. transferred directly to sheet by tracing

b. drawn on sheet using pattern as a reference

c. glued to sheet and cut around it

d. not needed

17. The bending brake is used:

a. to cut stock

b. for all seams and forming operations

c. for seams only

d. for most seams and forming operations

18. With which of the following materials is the vacuum former most commonly used?

a. lead b. plastic c. tin plate d. steel

19. When welding, the electrode is:

a. the holder b. the flux c. the welding rod d. the welding shield

20. Which of the following list of careers in manufacturing requires a college degree?

a. furnace installer b. auto body mechanic c. mechanical engineer d. pattern maker

CONSTRUCTION

21. Into which of the following two classes is wood divided?

a. light and dark b. thick and thin c. hard and soft d. hot and cold

22. A brace and bit are used to:

a. cut corners b. cut a miter c. bore holes d. all of the above

23. Which of the following power machines is most similar to the coping saw?

a. sander b. drill press c. jig saw d. band saw

24. Which of the following hand tools are commonly used by a carpenter?

a. woodburner, sandpaper, bench rule, coping saw

b. chisel, c clamp, screwdriver, file card

c. steel square, hammer, handsaw, plane iron

d. pattern, vise, file, dividers

25. A mallet, try-square, and handsaw are tools most commonly used in which of the following shops?

a. construction b. visual communication c. power and transportation d. manufacturing

POWER AND TRANSPORTATION

26. a microphone converts sound energy into:

a. electrical energy
b. mechanical energy
c. heat energy
d. chemical energy

27. An electric circuit consists of a:

a. battery, pilot lamp, and a multimeter
b. resistor, switch, energy
c. voltage source, a load, and a complete path for current
d. hookup wire, multimeter, pilot lamp

28. Which of the following careers requires a college degree?

a. television repairman
b. electrician
c. electrical engineer
d. auto mechanic

29. A volt meter is used to measure:

a. electrical resistance
b. electrical current
c. electrical pressure
d. electrical power

30. Which of the following people repairs electrical appliances?

a. an electrical engineer
b. a television repairman
c. an appliance repairman
d. an electrician

VISUAL COMMUNICATIONS

31. On which of the following printing devices is a linoleum block used?

a. off-set duplicator
b. platen press
c. engraving machine
d. none of these

32. Which of the following is used to cut a film for silkscreening?

a. pen knife
b. sloyd knife
c. exacto knife
d. razor blade

33. When setting type, which of the following is used to check for errors?

a. platen press
b. proof press
c. engravograph
d. off-set duplicator

34. After a silkscreen design is finished, place the Ulano material:

a. under the design
b. on top of the design with wax side up
c. on top of the design with wax side down
d. away from the design

35. Which of the following career opportunities is <u>not</u> related to visual communications?

a. design b. drafting c. commercial art d. legal secretary

MERCHANDISING

36. A good method of determining whether or not a new product will sell is:

a. reading a book

b. conducting a market survey

c. trimming a showcase

d. mailing letters

37. The selling price of a product should include:

a. cost

b. cost and expenses

c. cost, expenses, and profit

d. cost and profit

38. Which one of the following jobs is <u>not</u> directly related to merchandising?

a. buyer b. inventory clerk c. carpenter d. sales person

39. Which of the following individuals is involved in the merchandising process?

a. buyer b. salesperson c. inventory clerk d. all of these

40. If an accountant depressed a "plus" key after each number he entered on a calculator, then depressed the "total" key, he would be:

a. adding b. subtracting c. multiplying d. dividing

BUSINESS COMMUNICATIONS

41. A stylus is used for:

a. writing a business letter

b. repairing typewriters

c. cutting a stencil

d. drawing illustrations

42. When applying for a job, the letter of application should be accompanied by:

a. a resume, or data sheet

b. an envelope with your return address

c. a carbon copy of the letter

d. all of the above

43. The federal government requires that each worker have a:

a. time card b. social security card c. personal data sheet d. high school diploma

44. Which of the following kinds of information should <u>not</u> be included on a personal data sheet?

a. name b. address c. educational background d. religion

45. Which of the following occupations requires a college education?

a. secretary b. file clerk c. accountant d. receptionist

INFORMATION PROCESSING

46. The following names appear on a payroll register. Which grouping is <u>not</u> in correct alphabetical order on this list?

a. Clark, Clarke, Clarkson, Clarkton

b. David, Davidson, Davis, Davison

c. Brown, Browne, Browning, Bronner

47. A reference is a(n):

a. recommendation b. list of employees c. application d. all of the above

48. Which of the following people would probably <u>not</u> work with computers?

a. data processor b. keypunch operator c. lab technician d. computer programmer

49. A personnel interviewer should be acquainted with all but one of the following:

a. company products and services

b. jobs available in a company

c. company hiring practices

d. number of children in employee's family

50. When a punched card is used for recording information, the data on the card are represented by:

a. printed captions b. magnetized spots c. punched holes d. none of these

APPENDIX F

Student Questionnaire - Project SET

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Project SET

Student Questionnaire

1. What do you like best about the work experience program?

2. What do you like least about the work experience program?

3. How has the work experience program changed your feelings about work?

4. How has the work experience program changed your feelings about school?

5. If you were running this program, what changes would you make?

6. Other (Please add any additional comments you would like to make about the work experience program.)

5/73

APPENDIX G

Employer Questionnaire - Project SET

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Avenue
Pittsburgh, Penna. 15213

Evaluation Instruments prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Project SET

Employer Questionnaire

1. Are you satisfied with your Project SET student's current work performance? Please explain:

_____

_____

2. Has this student improved during the period of employment?
___ Yes ___ No How?

_____

_____

3. Do you think the student was adequately prepared to assume job responsibilities? ___ Yes ___ No Please explain:

_____

_____

4. Do you think the contact between you and the school has been sufficient to solve any difficulties that have arisen? ___ Yes ___ No Please explain:

_____

_____

5. Would you consider hiring this student as a full-time employee after graduation? ___ Yes ___ No Please explain:

_____

_____

6. Have you any suggestions for program changes which would better serve your needs?

_____

_____

7. Other (Have you any additional comments about any part of the work experience program?)

_____

_____

6/73

APPENDIX H

Student Questionnaire - COOP

SELECTED FUNCTIONAL COMPONENTS OF A VOCATIONAL EDUCATION COUNSELING SYSTEM FOR URBAN YOUTH

Sponsor: Pittsburgh Board of Education
341 South Bellefield Ave.
Pittsburgh, Penna. 15213

Evaluation Instruments Prepared by:
American Institutes for Research
710 Chatham Center Office Building
Pittsburgh, Penna. 15219

Cooperative Work Experience Program

Student Questionnaire

1. How was your first contact with the Cooperative Work Experience coordinator made? _____

   _____

2. When was this contact made? _____ What did you discuss?

   _____

3. How did the coordinator assist you in selecting a satisfactory cooperative work experience? _____

   _____

4. During this school year, approximately how many times did you ask to meet with the coordinator? _____

   Of this number, how many times did you actually meet with the coordinator? _____

   How many times did the coordinator ask to meet with you? _____

5. How were you advised about employers' expectations regarding your appearance, work habits, attendance or general behavior before you started your work experience? _____

   _____

   _____

6. Why did you choose your particular skill area? _____

_____

_____

7. Does your cooperative work experience match your skill training?

_____ Please explain._____

_____

_____

8. What are your career plans following graduation? _____

_____

_____

9. What factors affected your decision? _____

_____

_____

10. If you were directing the work experience program, what changes would you make? _____

_____

_____

APPENDIX I

Employer's Questionnaire - COOP

Employer's Questionnaire (COOP)

The purpose of this questionnaire is to ask your general opinion regarding the adequacy of vocational training, as reflected in the job performance of Pittsburgh Public School graduates within your employ. Your objective response to these items will help insure that Occupational and Vocational Training (OVT) programs remain responsive to your needs.

1. Employer Identification

   Name of Organization _____

   Type of Operation _____

   Number of Employees at this Site _____

   Total Number of Employees in Company _____

2. For what types of employment have you hired OVT graduates (check as many as apply)

   _____ Secretarial, clerical
   _____ Labor
   _____ Skilled trade
   _____ Medical, dental, lab assistant
   _____ Food Services
   _____ Sales
   _____ Bank services
   _____ Maintenance
   _____ Cosmetology
   _____ Transportation
   _____ Data Processing
   _____ Other (explain) _____

3. The OVT graduates that I employ are doing an adequate job. (Circle the appropriate number)

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

4. Relative to other new employees, how much orientation and training is required before the OVT graduates can perform the job satisfactorily? (Circle the appropriate number)

   1 Less orientation

   2 About the same

   3 More orientation

5. Relative to other new employees, how would you rate the performance of OVT graduates? (Circle the appropriate number)

   1 Above average

   2 Average

   3 Below average

6. What major problems have you had with OVT graduates?

___ _____

___ _____

___ _____

7. Based on your experience with OVT graduates, rate their attendance, attitude toward co-workers, and attitude toward supervisors by circling the appropriate rating for each of the behaviors indicated in the chart below.

Rating			
	Attendance	Attitude Toward Co-Workers	Attitude Toward Supervisors
Excellent	4	4	4
Acceptable	3	3	3
Below Average	2	2	2
Unacceptable	1	1	1

8. Training received by OVT graduates has been braod enough to allow them to transfer between jobs requiring moderately different skills. (Circle the appropriate number)

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

9. OVT graduates are highly promotable. (Circle the appropriate number)

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

10. When you are in need of employees, there are a number of sources that you might utilize. For the sources listed below, indicate your first, second, and third preference by placing the number 1, 2, or 3 before the source.

(6) ___Private employment agency
(6) ___State employment agency
(63) ___Your own employment office files
(64) ___Relatives, friends or acquaintances of present employees
(65) ___Public school sources (guidance counselors, vocational coordinators, etc.)
(66) ___Other (please specify) _____

11. Do you have, or have you ever had, a COOP (Cooperative Work-Study Program) student in your employ? (Circle the appropriate response)

(67) 1 Yes 2 No

If yes: a. How many of these students have you had in your employ? _____

b. Of this number, how many continued in your employ after graduation? _____

12. These COOP students were sufficiently prepared to make a positive contribution to my operation. (Circle the appropriate number)

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

Questionnaire prepared by American Institutes for Research, Pittsburgh, Pa.